No. 1

3 JANUARY 2004

UNITED STATES OF AMERICA

NOTICE TO MARINERS

Commemorating 135 Years of Continuous Service

Published Weekly by the
National Geospatial-Intelligence Agency

Prepared Jointly with the
National Ocean Service and U.S. Coast Guard

Contents

Visit the Maritime Safety Information Division website at http://pollux.nss.nga.mil/

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IMPORTANT INFORMATION

The Notice to Mariners is published by the National Geospatial-Intelligence Agency (NGA), under the authority of Department of Defense Directive 5105.40, to advise mariners of important matters affecting navigational safety, including new hydrographic discoveries, changes in channels and navigational aids, etc. (U.S. Code Title 10, Sec. 442 and Title 44, Sec. 1336 refer). Nothing in the arrangement of information implies endorsement or acceptance by NGA in matters affecting the status and boundaries of States and territories. The Notice to Mariners presents corrective information affecting charts, NGA Hydrographic Products Catalog, Coast Pilots, Sailing Directions, Fleet Guides, USCG Light Lists, NGA List of Lights, Radio Navigational Aids and other products produced by the National Geospatial-Intelligence Agency, National Ocean Service and U.S. Coast Guard.

Information for the Notice to Mariners is contributed by the following Agencies: National Geospatial-Intelligence Agency (NGA) (Department of Defense) for waters outside the territorial limits of the United States; National Ocean Service (NOS) (Department of Commerce), which is charged with the surveys and charting of the coasts and harbors of the United States and its territories; the U.S. Coast Guard (USCG) (Department of Homeland Security), which is responsible for the safety of life at sea and the establishment and operation of aids to navigation; and the U.S. Army Corps of Engineers (Department of Defense), which is charged with the improvement of rivers and harbors of the United States. In addition, important contributions are made by foreign hydrographic offices and cooperating observers of all nationalities.

For further information concerning NGA hydrographic products and services, including the Maritime Safety Information Website, users may contact:

Name	Telephone	DSN	FAX
Maritime Safety Information Division	301-227-5006	287-5006	301-227-5745
World-Wide Navigational Warning Service	301-227-3147	287-3147	301-227-3731
Fleet Liaison Officer	301-227-3120	287-3120	301-227-4211
Maritime Safety Information Website	301-227-3296	287-3296	301-227-4211
Notice to Mariners: Regions 1 and 2	301-227-3122	287-3122	301-227-3175
Notice to Mariners: Regions 3, 4, 5	301-227-3146	287-3146	301-227-3175
Notice to Mariners: Regions 6 thru 9	301-227-3146	287-3146	301-227-3175
Sailing Directions, Fleet Guides	301-227-3183	287-3183	301-227-3174
Navigation Science Publications	301-227-3120	287-3120	301-227-3731
Distribution Issues	301-227-7652	287-7652	301-227-4211

The Maritime Safety Information Website can be accessed directly at **(http://pollux.nss.nga.mil)**. For your convenience NGA provides three e-mail addresses. For information affecting Notice to Mariners use NavNotices@nga.mil, for information affecting Sailing Directions and all other navigational publications use SDPUBS@nga.mil, for information concerning the Maritime Safety Information Website, use webmaster_nss@nga.mil.

Mariners are requested to notify NGA of discrepancies in charts and publications, using the Marine Information Report and Suggestion Sheet at the back of this Notice to Mariners. This form should also be used to report permanent changes, additions, or deletions from charted or published information. Reports which constitute an immediate hazard to navigation should be sent to the nearest NAVAREA Coordinator via coast radio stations. All reports are greatly appreciated. Marine Information Report and Suggestion sheets received during the past week were submitted by the following observers:

Observer	**Ship/Organization**
ETCS(SS) Lawrence	USS MARYLAND

Cover Photo: The **USS SLATER (DE-766)** is a Canon Class Destroyer Escort launched on February 13, 1944 and commissioned on May 1, 1944. Of the 565 Destroyer Escorts built during World War II, the **USS SLATER** is the only one remaining afloat in the United States and the last one with original battle armament and configuration. She has a displacement of 1,200 tons, is 306 feet long with a beam of 36 feet and carried a crew of 216 men when commissioned. The **USS SLATER** was named after Frank O. Slater of Alabama, a sailor killed aboard the **USS SAN FRANCISCO** during the Battle of Guadalcanal in 1942. The **USS SLATER** saw service in both the Atlantic and Pacific theaters during World War II. She was decommissioned in 1946 and was transferred to Greece on March 1, 1951. The **USS SLATER** served in the Hellenic Navy until 1991, when she was donated to the Destroyer Escort Sailors Association (DESA). She was returned to New York in 1993 and was transferred to her permanent homeport of Albany, New York in October 1997. The **USS SLATER** now serves as a living museum and is being maintained by a crew of dedicated volunteers.

INFORMATION OF SPECIAL INTEREST OR IMPORTANCE TO MARINERS

HYDROGRAM

National Geospatial-Intelligence Agency
Bethesda, MD 20816-5003

SPECIAL ANNOUNCEMENTS

NEW PRODUCTS OR SERVICES

IMPORTANT CHANGES

NM 1/04 **3 January 2004**

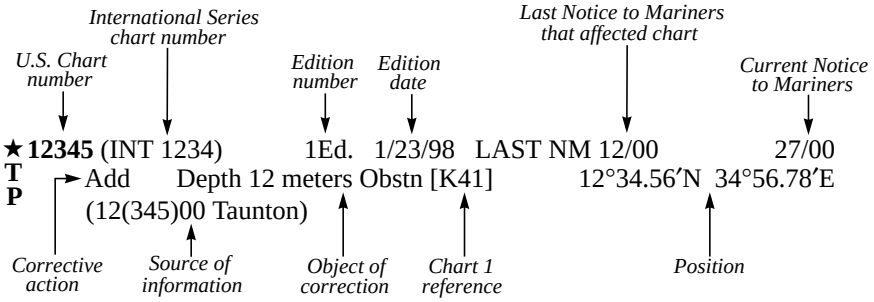
IMPORTANT INFORMATION

THIS NOTICE CONTAINS A VARIETY OF SUBJECTS AMPLIFYING INFORMATION NOT USUALLY FOUND ON CHARTS OR IN NAVIGATIONAL PUBLICATIONS. PARAGRAPHS 1 THRU 65 ARE “SPECIAL NOTICE TO MARINERS PARAGRAPHS” WHICH ARE PROMULGATED ONCE EACH YEAR IN THE INTEREST OF SAFE NAVIGATION. SEE SECTION I. ADDITIONAL ITEMS CONSIDERED OF INTEREST TO THE MARINER WILL BE FOUND IN SECTION III OF THIS NOTICE.

EXPLANATION OF CONTENTS

The Notice to Mariners contains corrective information affecting nautical charts, the NGA Hydrographic Products Catalog, Coast Pilots, Sailing Directions, Fleet Guides, USCG Light Lists, NGA List of Lights, Radio Navigational Aids and other related nautical publications. The information contained in these corrections is important to safe navigation. It is the user's responsibility to decide which of their charts and publications require correction. Consult the U.S. Coast Guard Local Notice to Mariners for information pertaining to waterways within the United States that are not normally used by oceangoing vessels. Because of the sometimes transitory nature of aids to navigation, depths and port information, local area sources should be consulted whenever possible. This publication is not required to be maintained intact. Portions may be separated for correction or attachment to an affected product. The Notice to Mariners is divided into the followng sections:

Section I-1 contains corrections to nautical charts listed in numeric order by chart number. Each chart correction listed applies only to that particular chart. Related charts, if any, will have their own specific correction listed separately. Users should also refer to U.S. Chart 1 Nautical Chart Symbols, Abbreviations and Terms for additional information pertaining to the correcting of charts. The illustration below describes the elements that comprise a typical chart correction:



A chart correction preceded by:

★ indicates that it is based upon original U.S. source information.

T indicates that it is temporary in nature.

P indicates that it is preliminary, and that permanent corrective action will appear in a future Notice to Mariners.

The letter **M** immediately following the chart number indicates that the correction should be applied to the metric side of the chart only. The letter **M** is not a part of the chart number.

The letter **N** preceding the current Notice to Mariners number indicates that the affected chart is on Limited Distribution and is normally only for use by U.S. Navy, government-owned or -chartered vessels.

Courses and bearings are given in degrees true.

Light sectors are expressed in degrees true from the vessel TOWARD the light.

The visible range(s) listed for lights is normally the nominal range (the distance at which it can be seen in clear weather), expressed in nautical miles, except in the Great Lakes where it is expressed in statute miles.

The colors of structures and lights of navigational aids are abbreviated in accordance with Chart 1.

Section I-2* contains all chartlets, depth tabulations and notes associated with the chart corrections in Section I-1. Chartlets and depth tabulations supersede all previous information portrayed.

Section I-3 lists all NGA and NOS charts which have been affected by Notice to Mariners and the notice numbers which have affected them since the date of the oldest Summary of Corrections or the chart's announcement, whichever is later.

Section II-1 is a weekly listing of corrections to the NGA Hydrographic Products Catalog, including new charts and publications. It also contains the latest price category information.

Section II-2* contains corrections to navigation publications, including Sailing Directions, Coast Pilots, Fleet Guides, Radio Navigational Aids (Pub. 117), *The American Practical Navigator* and other related nautical publications.

Section II-3* lists weekly updates to the USCG Light Lists.

Section II-4* lists weekly updates to the NGA List of Lights.

Section II-5 lists all NGA, NOS and USCG navigation publications which have been affected by Notice to Mariners and the notice numbers which have affected them since the date of the publication's announcement.

Section III-1 lists the message number of all in-force Navigational Warnings, and the text of those warnings promulgated during the previous week. Notice to Mariners Nos. 13, 26 and 39 list a summary of all in-force Navigational Warnings for the preceding quarter. Notice to Mariners No. 52 lists a complete summary of all in-force Navigational Warnings.

Section III-2 contains miscellaneous information of particular interest to the maritime community.

*The left-hand pages of these sections are intentionally blank.

INDEX TO SPECIAL NOTICE TO MARINERS PARAGRAPHS

* *Denotes significant change*

INDEX TO SPECIAL NOTICE TO MARINERS PARAGRAPHS

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(1) THE PRUDENT MARINER.

a. Warning On Use Of Floating Aids To Navigation and on Aids to Navigation in General and Fixing a Navigational Position.

The aids to navigation depicted on charts comprise a system consisting of fixed and floating aids with varying degrees of reliability. Therefore, prudent mariners will not rely solely on any single aid to navigation, particularly a floating aid. An aid to navigation also refers to any device or structure external to a craft, designed to assist in determination of position. This includes celestial, terrestrial, and electronic means, such as Global Positioning System (GPS) and Differential GPS (DGPS). Here, too, the prudent mariner will not rely solely on any single aid to navigation.

The buoy symbol is used to indicate the approximate position of the buoy body and the sinker which secures the buoy to the seabed. The approximate position is used because of practical limitations in positioning and maintaining buoys and their sinkers in precise geographical locations. These limitations include, but are not limited to, inherent imprecisions in position fixing methods, prevailing atmospheric and sea conditions, the slope of and the material making up the seabed, the fact that buoys are moored to sinkers by varying lengths of chain, and the fact that buoy and/or sinker positions are not under continuous surveillance but are normally checked only during periodic maintenance visits which often occur more than a year apart. The position of the buoy body can be expected to shift inside and outside the charting symbol due to the forces of nature. The mariner is also cautioned that buoys are liable to be carried away, shifted, capsized, sunk, etc. Lighted buoys may be extinguished or sound signals may not function as the result of ice or other natural causes, collisions, or other accidents. Many of these factors also apply to articulated lights.

For the foregoing reasons, a prudent mariner must not rely completely upon the position or operation of floating aids to navigation, but will also utilize bearings from fixed objects and aids to navigation on shore. Further, a vessel attempting to pass close aboard always risks collision with a yawing buoy or with the obstruction the buoy marks.

b. Use of Foreign Charts.

In the interest of safe navigation, caution should be exercised in the use of foreign charts not maintained through U.S. Notice to Mariners.

Foreign produced charts are occasionally mentioned in NGA Sailing Directions when such charts may be of a better scale than U.S. produced charts. Mariners are advised that if or when such foreign charts are used for navigation it is their responsibility to maintain those charts from the Notice to Mariners of the foreign country producing the charts.

The mariner is warned that the buoyage systems, shapes, colors, and light rhythms used by other countries often have a different significance than the U.S. system.

Mariners are further warned about plotting positions, especially satellite-derived positions such as from GPS, onto foreign charts where the datum is unknown or the conversion from WGS-84 is unknown.

c. Chart Notes Regarding Different Datums.

Particular caution should be exercised during a passage when transferring the navigational plot to an adjacent chart upon a different geodetic datum or when transferring positions from one chart to another chart of the same area which is based upon a different datum. The transfer of positions should be done by bearings and distances from common features.

Notes on charts should be read with care, as they give important information not graphically presented. Notes in connection with the chart title include the horizontal geodetic datum which serves as a reference for the values of the latitude and longitude of any point or object on the chart. The latitudes and longitudes of the same points or objects on a second chart of the same area which is based upon a different datum will differ from those of the first chart. The difference may be navigationally significant. Additionally, datum changes between chart editions could significantly affect the positions of navigational aids found in the List of Lights and other NGA publications.

Positions obtained from satellite navigation systems, such as from GPS, are normally referred to the World Geodetic System 1984 (WGS-84) Datum. The differences between GPS satellite-derived positions and positions on some foreign charts cannot be determined: mariners are warned that these differences MAY BE SIGNIFICANT TO NAVIGATION and are therefore advised to use alternative sources of positional information, particularly when closing the shore or navigating in the vicinity of dangers.

(Repetition NTM 1(1)03) (NGA/PTNM)

(2) NAUTICAL CHART SYMBOLS AND ABBREVIATIONS INFORMATION.

Symbols and abbreviations approved for use on all regular nautical charts published by the National Geospatial-Intelligence Agency and the National Ocean Service are contained in the November 1997 edition of Chart No. 1, United States of America

(2) NAUTICAL CHART SYMBOLS AND ABBREVIATIONS INFORMATION. (Continued).

Nautical Chart Symbols, Abbreviations and Terms. This publication is available from the National Geospatial-Intelligence Agency and the National Ocean Service NOAA, and its sales agents and can be found on the NGA website. The introduction to this publication includes a number of paragraphs on metric and fathom charts, soundings, drying heights, shorelines, landmarks, buoys, IALA buoyage, heights, conversion scales, traffic separation schemes, and correction dates.

Buoys and Beacons of the IALA Buoyage System Regions A and B are illustrated in the back of Chart No. 1, including light characteristics in full color.

The various sections comprising the Table of Contents follow the sequence presented in The International Hydrographic Organization (IHO) Chart 1 (INT1); therefore, the numbering system in this publication follows the standard format approved and adopted by the IHO. Where appropriate, each page lists separately the current preferred U.S. symbols shown on charts of the National Ocean Service (NOS) and NGA. Also shown in separate columns are the IHO symbols and symbols used on foreign charts reproduced by NGA.

(Repetition NTM 1(2)03) (NGA/PTNM)

(3) USE OF THE METRIC SYSTEM ON NGA PRODUCTS.

The National Geospatial-Intelligence Agency (NGA) is continuing the program to convert the depths and heights on nautical charts and in publications to the metric system. Although many facsimile reproductions of foreign charts have shown depths and heights in meters for several years, the NGA originated charts began to show depths and heights in meters instead of fathoms and/or feet in January 1970. Depths are shown in meters (usually in meters and decimeters to 21 meters) and boldly stated in the chart title and in purple colored type in the outer chart borders. A conversion table from meters and decimeters to fathoms and feet is also carried on each chart.

List of Lights, Radio Aids and Fog Signals and Sailing Directions, as they are reformatted, will adopt the Metric Measurement System as feasible.

(Repetition NTM 1(3)03) (NGA/PTNM)

(4) GEOGRAPHIC NAMES USAGE FOR NGA PRODUCTS.

Wherever possible, names used on NGA charts and in NGA publications are in the form approved by the United States Board on Geographic Names. Generally, local official spellings are used for those features entirely within a single sovereignty, while names of countries and those features which are common to two or more countries or which lie beyond single sovereignty carry Board-approved conventional spellings (i.e. names in common English language usage). When alternate names would be of value to the user, they may be shown for information purposes within parentheses. Important individual name changes are made to all revised charts as the opportunity permits. Geographic names or their spellings do not necessarily reflect recognition of the political status of an area by the United States Government.

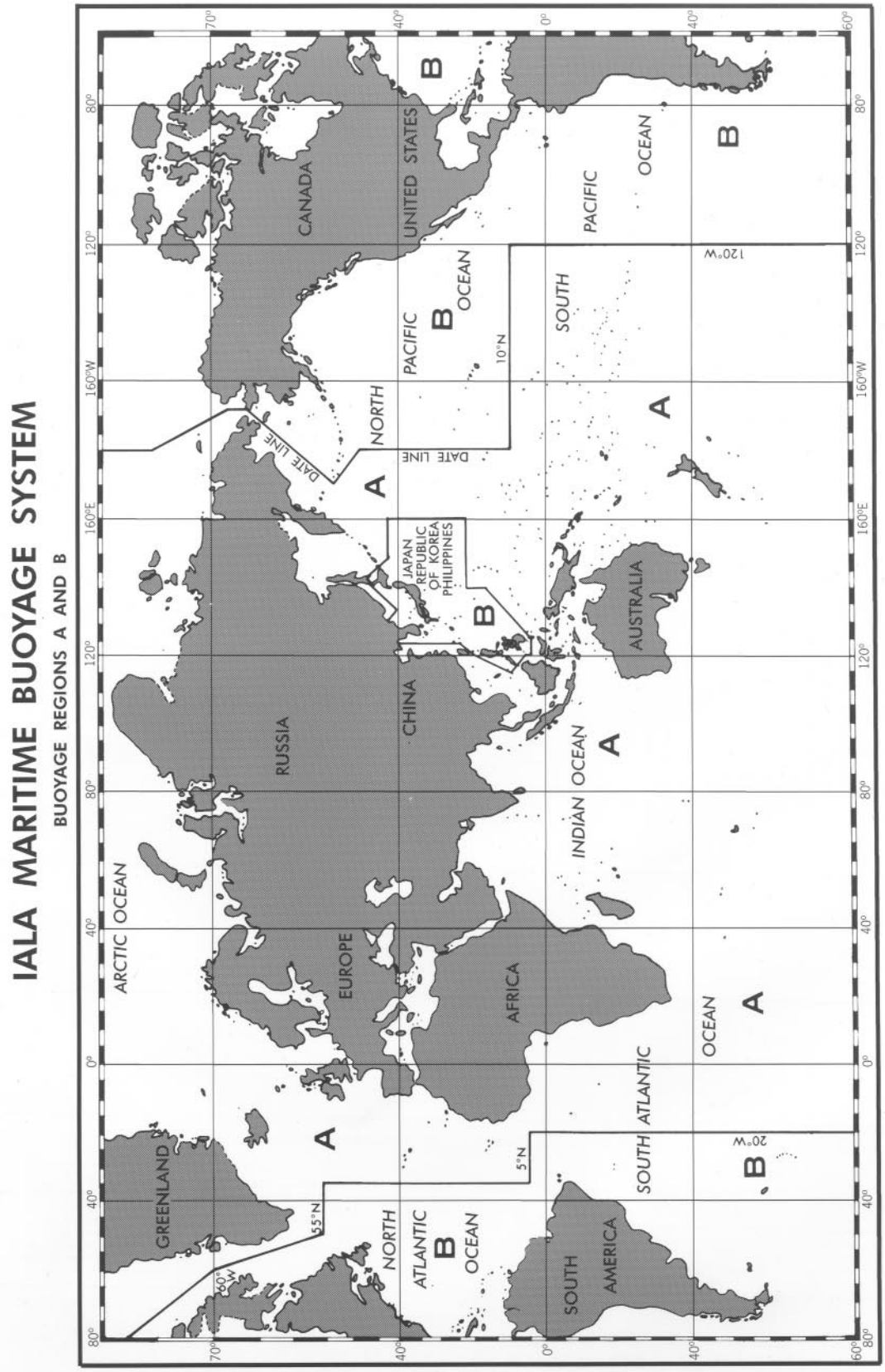
(Repetition NTM 1(4)03) (NGA)

(5) INTERNATIONAL ASSOCIATION OF MARINE AIDS TO NAVIGATION AND LIGHTHOUSE AUTHORITIES (IALA) MARITIME BUOYAGE SYSTEM.

The IALA Maritime (combined Cardinal/Lateral) Buoyage System has been implemented by nearly every maritime jurisdiction worldwide as either REGION A (red to port) or REGION B (red to starboard). The actual conversion began in 1977 and for most areas, is completed.

The terms “REGION A” and “REGION B” are used to determine which type of buoyage region is in effect. The major difference between the two buoyage regions is the lateral marks. When viewed from sea, the lateral marks in REGION A will be red to port; in REGION B they will be red to starboard. Shapes of lateral marks will be the same in both REGIONS, can to port; cone (nun) to starboard. Cardinal and other marks continue to follow current guidelines and may be found in both REGIONS. A modified lateral mark, indicating the preferred channel where a channel divides, is in place for use in both REGIONS. Each chart reflects a REGION A or REGION B note to indicate which type of lateral buoyage is in use. A graphic illustration showing the approximate REGION A and B limits can be found on the following page.

(Repetition NTM 1(5)03) (NGA/PTNM)


IALA MARITIME BUOYAGE SYSTEM
BUOYAGE REGIONS A AND B
ARCTIC OCEAN
GREENLAND
CANADA
UNITED STATES
RUSSIA
EUROPE
CHINA
JAPAN
REPUBLIC OF KOREA
PHILIPPINES
AUSTRALIA
AFRICA
INDIAN OCEAN
NORTH PACIFIC OCEAN
SOUTH PACIFIC OCEAN
NORTH ATLANTIC OCEAN
SOUTH ATLANTIC OCEAN
SOUTH AMERICA
DATE LINE
55°N
60°W
5°N
20°W
10°N
120°W
A
B

(6) INTERNATIONAL ICE PATROL SERVICE.

Between the months of February and August, the International Ice Patrol (IIP) conducts its annual mission of defining the limits of iceberg distribution in the northwest Atlantic and providing iceberg warnings to mariners. IIP determines iceberg distribution using iceberg sighting reports filed by ships and planes crossing the area. It also regularly conducts ice reconnaissance patrols to monitor the region of the Grand Banks of Newfoundland and define the southern, southeastern and southwestern limits of iceberg distribution in this dangerous region. Ice Patrol Bulletins are broadcast at various times via Voice, SITOR, NAVTEX, and Inmarsat-C SafetyNET, and through the Internet. Details are contained in Chapter 3 of Radio Navigational Aids, Pub. 117.

All shipping is requested to assist in the operation of the International Ice Patrol by reporting all ice sightings. Format and content of ice sighting messages are included in Pub. 117.

(Supersedes NTM 1(6)03) (USCG)

(7) SPECIAL WARNINGS (In force 17 December 2003).

SPECIAL WARNING NO. 1.

Navigational warnings broadcast by NGA are normally divided into categories, HYDROLANTS and HYDROPACS, referring respectively to the Atlantic and Pacific Oceans. It has been determined there now exists a need for disseminating information of general interest not covered by the above categories. Therefore, with this message the Special Warnings series is reintroduced. The messages will be transmitted from all U.S. Navy and Coast Guard Stations broadcasting HYDROS.

(May 27, 1948)

SPECIAL WARNING NO. 29.

CUBA.

1. Mariners are advised to use extreme caution in transiting the waters surrounding Cuba. Within distances extending in some cases upwards of 20 miles from the Cuban coast, vessels have been stopped and boarded by Cuban authorities. Cuba vigorously enforces a 12-mile territorial sea extending from straight baselines drawn from Cuban coastal points. The effect is that Cuba's claimed territorial sea extends in many cases beyond 12 miles from Cuba's physical coastline.
2. The publication of this notice is solely for the purpose of advising United States mariners of information relevant to navigational safety and in no way constitutes a legal recognition by the United States of the validity of any foreign rule, regulation, or proclamation so published.

(March 1, 1962, updated January 1, 1982, reviewed November 9, 1994)

SPECIAL WARNING NO. 77.

PAPUA NEW GUINEA—BOUGAINVILLE COAST.

1. Bougainville Island declared unilateral independence from Papua New Guinea May 17, 1990. The government of Papua New Guinea does not recognize the declaration. Consequently, the political situation may be tense in the future.
2. The following Notice to Mariners No. 36/90 issued by the government of Papua New Guinea is quoted in its entirety:
   Quote
   Overseas vessels are advised to stand clear of the islands of Bougainville and Buka and to remain outside of territorial waters extending 12 nautical miles from the coast of Bougainville and immediately adjacent islands but excluding Solomon Islands territory, and excluding the groups of islands or atolls known as Feni, Green, Nuguria, Carteret (Kilinailau), Mortlock (Tauu) and Tasman (Nukumanu). Any vessel entering the waters adjacent to Bougainville or Buka will be subject to stop and search powers. This Notice to Mariners is effective immediately (22nd May 1990 EST) in respect to overseas shipping. Papua New Guinea
   coastal vessels will be restricted as of midnight local time on 20th May 1990. Restrictions will continue for an indefinite period. Charts affected are BA 214, BA 2766, BA 3419, BA 3420, BA 3830, BA 3994, INT 604 and AUS 4604. Dept. of Transport. Port Moresby. Papua New Guinea.
   Unquote
3. U.S. mariners are advised to exercise extreme caution in entering and transiting the waters of Bougainville.

(Dept. of State) (25 May 1990)

(7) SPECIAL WARNINGS. (Continued).

SPECIAL WARNING NO. 81.
LIBYA.
1. Due to unsettled relations between the United States Government and the government of Libya, U.S. mariners are advised to exercise caution in transiting the waters of the Gulf of Sidra south of 32-30N. The United States does not maintain an embassy in Libya and cannot ensure the safety of its citizens.
2. The publication of this notice is solely for the purpose of advising United States mariners of information relevant to navigational safety and in no way constitutes a legal recognition by the United States of the validity of any foreign rule, regulation or proclamation so published.
3. Cancel Special Warning No. 52.

(Dept. of State) (31 Aug 1990)

SPECIAL WARNING NO. 82.
MOROCCO.
1. U.S. mariners are advised to exercise caution within the territorial waters claimed by Morocco. Moroccan coastal protection warships, while engaged in anti-drug smuggling activities or enforcing territorial fishing rights, have been known to open fire on innocent vessels.
2. The publication of this notice is solely for the purpose of advising United States mariners of information relevant to navigational safety and in no way constitutes a legal recognition by the United States of the validity of any foreign rule, regulation or proclamation so published.

(Dept. of State) (31 Aug 1990)

SPECIAL WARNING NO. 89.
WEST COAST OF AFRICA—WESTERN SAHARA.
1. Prior to the September 1991 cease-fire between Morocco and the Polisario, unprovoked attacks on shipping off the coast of the Western Sahara by Polisario guerrillas using machine guns, grenades, and mortars occurred, resulting in the loss of life and property.
2. Despite the cease-fire, the potential for violent incidents still exists. Mariners are advised to continue using extreme caution and remain well offshore when transiting the waters off the west coast of Africa between 27-40N 013-11W and Cap-Blanc (Cabo Blanco) (20-47N 017-03W) and particularly between Dakhla (Ad Dakhla) (23-42N 015-56W) and Cape Corbiero (Cabo Corveiro) (21-48N 016-59W).
3. The publication of this notice is solely for the purpose of advising United States mariners of information relevant to navigation safety and in no way constitutes a legal recognition by the United States of the validity of any foreign rule, regulation, or proclamation so published.
4. Cancel Special Warning No. 69.

(Dept. of State) (16 Oct 1992)

SPECIAL WARNING NO. 92.
LIBERIA.
1. Mariners are advised to use caution when sailing near the coast of Liberia.
2. The United Nations Security Council has passed Resolution 788 (November 19, 1992), which says that “All states shall, for the purposes of establishing peace and stability in Liberia, immediately implement a general and complete embargo on all deliveries of weapons and military equipment to Liberia until the Security Council decides otherwise.” Resolution 788 also “requests all states to respect the measures established by the Economic Community of West African States (ECOWAS) to bring about a peaceful solution to the conflict in Liberia.”
3. Cancel Special Warning No. 90.

(Dept. of State) (03 Dec 1992, revised 29 Oct 1997)

SPECIAL WARNING NO. 95.
NICARAGUA.
1. Mariners operating small vessels such as yachts and fishing boats should note that Nicaragua has boundary disputes with its neighbors in both its Caribbean and Pacific waters, especially with Honduras, and should exercise caution. There have been cases of foreign-flagged fishing vessels and other vessels being seized off the Nicaraguan coast by Nicaraguan authorities. The government of Nicaragua has adopted a new law that mandates the payment of a fine equal to 200 percent of the value of any boat caught fishing illegally within Nicaragua’s Exclusive Economic Zone (EEZ).

(7) SPECIAL WARNINGS. (Continued).

2. While in all cases passengers and crew have been released within a period of several weeks, in some cases the ships have been searched, personal gear and navigational equipment have been stolen, and there have been excessive delays in releasing vessels. Prompt U.S. Embassy consular access to detained U.S. citizens on Nicaragua's Caribbean coast may not be possible because of delays in notification due to the relative isolation of the region.
3. It should also be noted that there have been incidents of piracy in Caribbean and Pacific waters off the coast of Nicaragua, but the Nicaraguan navy has increased its patrols and no recent incidents have been reported.
4. Cancel Special Warning No. 91.

(Dept. of State) (10 Feb 1994, revised 29 Oct 1997)

SPECIAL WARNING NO. 107.
SRI LANKA.

1. Sri Lanka has announced that entrance by unauthorized vessels into the waters of Palk Strait and the eastern territorial waters of Sri Lanka is prohibited because of increased acts of terrorism against shipping and Sri Lankan Naval Vessels. Sri Lanka requires that vessels in the vicinity contact the Sri Lankan Command (Tel. 941-42-30-19, Fax: 941-433-986) for authorization if they wish to enter these areas.
2. The government also has established a restrictive zone in coastal waters along the west coast from Kalpitiya to Colombo Port's southern backwaters. Written permission from the Sri Lankan Command is required for entry into these waters as well. Sri Lankan authorities have advised that they will fire on violators.
3. The U.S. Embassy in Colombo reports that between July and September 1997, at least three foreign flag merchant vessels were attacked by the Liberation Tigers of Tamil Eelam (LTTE). One vessel operating as a passenger ferry off Mannar on the northwest coast was set on fire and sunk. A second vessel departing north from the Jaffna Peninsula was hijacked, stripped of equipment, and its crew temporarily held by the terrorists. One crew member was killed during the hijacking. A third vessel was loading a mineral cargo off the northeast coast near Pulmoddai when it was attacked and at least five members of its crew killed.
4. Any anti-shipping activity should be reported to NGA NAVSAFETY, U.S. State Department, or the nearest U.S. Consulate. Refer to NGA Pub. 117, Chapter 4, for instructions on filing a Ship Hostile Action Report (SHAR) or Anti-Shipping Activity Message (ASAM).
5. The publication of this notice is solely for the purpose of advising United States mariners of information relevant to navigational safety and in no way constitutes a legal recognition by the United States of the validity of any foreign rule, regulation or proclamation so published.
6. Cancel Special Warning No. 94.

(Dept. of State) (01 Dec 1997)

SPECIAL WARNING NO. 108.
SUDAN.

1. In January 1996 the Department of State warned all U.S. citizens against travel to Sudan due to ongoing violence within the country. Citing the U.S. Government's suspension of it's diplomatic presence in Sudan, the Department advised that its ability to provide emergency consular services would be severely limited. In August 1998 the State Department again warned U.S. citizens against travel to Sudan "following the recent U.S. air strikes against terrorist facilities and possible threats to Americans and American interests in that country." The latter warning (No. 98-041) remains in effect to date.
2. In November 1997 President Clinton issued Executive Order 13067 imposing a U.S. trade embargo against Sudan. Among the prohibited activities are "any transaction by a United States person relating to transportation of cargo to or from Sudan." "United States person" is defined as any U.S. citizen, permanent resident, entity organized under U.S. law, or person in the United States. The embargo is still in effect.
3. Notwithstanding the pre-existing travel warning and ongoing U.S. trade embargo, the recent U.S. missile attack on a chemical plant in Khartoum has raised concerns of possible retaliation against U.S. citizens and/or commercial interests. U.S. mariners are therefore urged to avoid Port Sudan or other Sudanese ports. U.S. vessels are also advised to remain well clear of Sudanese territorial waters in the western Red Sea area.

(Dept. of State) (20 October 1998)

SPECIAL WARNING NO. 111
SOMALIA.

1. Due to continuing conditions of armed conflict in Somalia and its territorial waters, mariners are advised to avoid the Port of Mogadishu and remain at least 50 nautical miles distant from the southeast Somali coast. Ships not specifically expected at the ports of Berbera and Bosaso should also avoid approaching the northern Somali coast.

(7) SPECIAL WARNINGS. (Continued).

2. In the past year there have been increasing reports of armed attacks on passing commercial vessels off the coast of Somalia. Fishing vessels, freighters and tankers have been fired upon by small speedboats with conventional weapons and rocket launchers. Ships have been hijacked, cargoes stolen, and crews held for ransom. Formerly confined to the port city of Mogadishu, the attacks have since extended into coastal waters--recent hijackings have occurred as far as 40 miles off shore.
3. The Department of State has warned U.S. citizens against all travel to Somalia. Inter-clan and interfactional fighting can flare up with little warning, and kidnapping and other threats to foreigners can occur unpredictably in many regions. There is no national government in Somalia to offer general security or police protection for travelers. While parts of the north are relatively peaceful, including much of the self-declared "Republic of Somaliland," there is no U.S. diplomatic presence in Somalia to provide up-to-date security assessments or consular assistance to U.S. citizens.
4. Cancel Special Warning No. 88.

(Dept. of State) (12 May 1999)

SPECIAL WARNING NO. 113.
YEMEN.

1. The level of risk for foreigners in Yemen remains high. On 12 October 2000, several U.S. citizens were killed and many more were injured in an incident involving a U.S. Navy ship in the port of Aden, Yemen in what may have been a terrorist attack. An explosion in the morning of 13 October 2000 caused minor damage to the British Embassy in Sanaa, Yemen and no casualties. While U.S. and Yemeni officials are still cooperating closely to determine the cause of the tragic explosion, the investigation has only started. Under these circumstances, U.S. mariners should avoid Yemeni ports for the present.
2. In light of this and other recent events, the U.S. Department of State warns U.S. citizens to defer travel to Yemen. U.S. citizens should exercise a very high level of caution and should only travel between cities by air or with an armed escort. They should register with the U.S. Embassy in Sanaa and remain in contact with the Embassy for updated security information at (967) (1) 238-844 through 238-852.

(Dept. of State) (13 October 2000)

SPECIAL WARNING NO. 114.
IRAN.

1. Mariners are advised to exercise extreme caution when transiting the waters of the North Persian Gulf.
2. Iranian-flag speedboats and patrol craft operating in Iranian and international waters have boarded vessels and demanded payment before the vessels are allowed to proceed.
3. Mariners should exercise extreme caution and vigilance when operating in this area, and should obtain and evaluate current warning information broadcasted by the National Geospatial-Intelligence Agency (NGA) via HYDROPAC broadcasts.
4. Any anti-shipping activity should be reported to NGA NAVSAFETY Bethesda MD or navsafety@nga.mil via Ship Hostile Action Report (SHAR) procedures (see NGA Pub. 117-Chapter 4), or directly to the U.S. State Department, or nearest U.S. Embassy or Consulate.
5. The publication of this notice is solely for the purpose of advising U.S. mariners of information relevant to navigation safety, and in no way constitutes a legal recognition by the United States of the validity of any foreign rule, regulation, or proclamation so published.
6. Cancel Special Warning No. 104.

(Dept. of State) (05 February 2001)

SPECIAL WARNING NO. 115.
PERSIAN GULF.

1. In the Persian Gulf, multi-national naval units continue to conduct a maritime operation to intercept the import and export of commodities and products to/from Iraq that are prohibited by UN Security Council Resolutions 661 and 687.
2. Vessels transiting the Persian Gulf and Gulf of Oman can expect to be queried and, if bound for or departing from Iraq or the Shatt-al-Arab waterway, also intercepted and boarded. Safe navigation may require vessels to be diverted to a port or anchorage prior to conducting an inspection.
3. Maritime interception operations in the Red Sea, Strait of Tiran and Strait of Hormuz have ceased. Cargo bound for Aqaba or transshipment from Aqaba may be inspected on shore according to an agreement worked out by the UN Sanctions Committee and Jordanian authorities.
4. Documentation requirements for the naval regime in the Persian Gulf and the shore-based regime in Aqaba are identical and can be found in the most recent HYDRPOACS covering the enforcement of UN sanctions against Iraq.

(7) SPECIAL WARNINGS. (Continued).

5. Stowage and other requirements for vessels transiting the Persian Gulf can also be found in the most recent HYDROPACS covering the UN sanctions against Iraq.
6. Ships which, after being intercepted, are determined to be in violation of UN Security Council Resolution 661 will not be allowed to proceed with their planned transit.
7. The intercepting ship may use all available communications, primarily VHF Channel 16, but including International Code of Signals, flag hoists, other radio equipment, signal lamps, loudspeakers, bow shots, and other appropriate means to communicate directions to a ship.
8. Failure of a ship to proceed as directed will result in the use of the minimum level of force necessary to ensure compliance.
9. Any ships, including waterborne craft and armed merchant ships, or aircraft, which threaten or interfere with multinational forces engaged in enforcing a maritime interception may be considered hostile.
10. Cancel Special Warning No. 100.

(Dept. of State) (16 Feb 2001)

SPECIAL WARNING NO. 116.
PAKISTAN.

1. Mariners calling on Pakistan are advised that levels of sectarian and factional violence remain high. Karachi, the main port, continues to be affected by politically-motivated killings.
2. On March 8, 1995, unknown assailants opened fire on an official U.S. Consulate shuttle in Karachi, killing two embassy employees and wounding a third.
3. Anti-American sentiment can be provoked easily and spontaneously in response to international events that radicals misconstrue as directed against Islam. For example, the UN resolution on sanctions against Afghanistan resulted in sporadic anti-American protests.
4. Port facilities and vessels may offer targets of opportunity for terrorist attacks. U.S. mariners are advised to exercise heightened security awareness and prudent security precautions when in Pakistani ports and waters.
5. Cancel Special Warning No. 102.

(Dept. of State) (05 March 2001)

SPECIAL WARNING NO. 117.
ALGERIA.

1. Due to the potential for domestic unrest and anti-foreign violence, U.S. mariners are advised to exercise extreme caution when in Algerian waters. Although there has only been one attack against foreigners since 1997, the level of risk in Algeria remains high.
2. Attacks against maritime vessels in Algerian ports have taken place several years ago. The U.S. Embassy in Algiers specifically identifies ports, train stations (trains), and airline terminals as terrorist targets. Commercial shipping should remain on maximum alert when in Algerian waters and maintain adequate security precautions.
3. The Department of State recommends that U.S. citizens evaluate carefully the implications for their security and safety before deciding to travel to Algeria, and that Americans in Algeria whose circumstances do not afford them effective (armed) protection depart the country. Americans arriving in the country should not disembark and travel within the country without adequate, including armed, protection immediately upon arrival.
4. Cancel Special Warning No. 103.

(Dept. of State) (05 March 2001)

SPECIAL WARNING NO. 118.
LEBANON.

1. The U.S. Department of State warns U.S. citizens, including U.S. mariners, of the risks of travel to Lebanon and recommends that Americans exercise caution while traveling there. During Lebanon's civil conflict from 1975 to 1990, Americans were targets of numerous terrorist attacks in Lebanon. While there have been very few such incidents in recent years, the perpetrators of these attacks are still present in Lebanon and retain the ability to act.
2. The local security environment can limit the movement of U.S. officials in certain areas of the country. This factor, plus limited staffing, may prevent the U.S. Embassy from performing full consular functions and providing timely assistance to U.S. citizens in Lebanon. Dual nationals and spouses of Lebanese citizens can encounter particular difficulties, and should see the Department of State Consular Information Sheet on Lebanon. U.S. citizens who travel to Lebanon despite this warning should exercise extreme caution. U.S. citizens traveling to Lebanon are encouraged to register at the U.S. Embassy in Beirut.

(7) SPECIAL WARNINGS. (Continued).

3. The security situation may change rapidly, and visitors to Lebanon should monitor the news for reports of incidents that might affect their personal safety.
4. Cancel Special Warning No. 71.

(Dept. of State) (09 March 2001)

SPECIAL WARNING NO. 119.
SIERRA LEONE.

1. Mariners are strongly advised not to use any ports in Sierra Leone except for the port of Freetown, which is currently considered to provide safe harborage. Mariners should note that the Department of State warns U.S. citizens against travel to Sierra Leone. Although the security situation in Freetown has improved somewhat, areas outside the capital are still very dangerous.
2. The Department of State has terminated the ordered departure status of U.S. Government personnel in non-emergency positions. However, the U.S. Embassy in Freetown currently operates with a reduced staff. Only emergency consular services to U.S. citizens are available, and the Embassy's ability to provide these services is limited. U.S. citizens in Sierra Leone should review their own personal security situations in determining whether to remain in the country.
3. Cancel Special Warning No. 109.

(Dept. of State) (16 March 2001)

SPECIAL WARNING NO. 120.
WORLDWIDE.

1. Due to recent events in the Middle East and the American homeland, U.S. forces worldwide are operating at a heightened state of readiness and taking additional defensive precautions against terrorist and other potential threats. Consequently, all aircraft, surface vessels, and subsurface vessels approaching U.S. forces are requested to maintain radio contact with U.S. forces on Bridge-to-Bridge Channel 16, international air distress (121.5 MHz VHF) or MILAIR distress (243.0 MHz UHF).
2. U.S. forces will exercise appropriate measures in self-defense if warranted by the circumstances. Aircraft, surface vessels, and subsurface vessels approaching U.S. forces will, by making prior contact as described above, help make their intentions clear and avoid unnecessary initiation of such defensive measures.
3. U.S. forces, especially when operating in confined waters, shall remain mindful of navigational considerations of aircraft, surface vessels, and subsurface vessels in their immediate vicinity.
4. Nothing in the special warning is intended to impede or otherwise interfere with the freedom of navigation or overflight of any vessel or aircraft, or to limit or expand the inherent self-defense rights of U.S. forces. This special warning is published solely to advise of the heightened state of readiness of U.S. forces and to request that radio contact be maintained as described above.

(Dept. of State) (16 November 2001)

SPECIAL WARNING NO. 121.
PERSIAN GULF

1. Coalition naval forces may conduct military operations in the Eastern Mediterranean Sea, Red Sea, Gulf of Aden, Arabian Sea, Gulf of Oman, and Arabian Gulf. The timely and accurate identification of all vessels and aircraft in these areas are critical to avoid the inadvertent use of force.
2. All vessels are advised that Coalition naval forces are prepared to exercise appropriate measures in self-defense to ensure their safety in the event they are approached by vessels or aircraft. Coalition forces are prepared to respond decisively to any hostile acts or indications of hostile intent. All maritime vessels or activities that are determined to be threats to Coalition naval forces will be subject to defensive measures, including boarding, seizure, disabling or destruction, without regard to registry or location. Consequently, surface vessels, subsurface vessels, and all aircraft approaching Coalition naval forces are advised to maintain radio contact on Bridge-to-Bridge Channel 16, international air distress (121.5 MHz VHF) or military air distress (243.0 MHz UHF).
3. Vessels operating in the Middle East, Eastern Mediterranean Sea, Red Sea, Gulf of Oman, Arabian Sea, and Arabian Gulf are subject to query, being stopped, boarded and searched by US/Coalition warships operating in support of operations against Iraq. Vessels found to be carrying contraband bound for Iraq or carrying and/or laying naval mines are subject to detention, seizure and destruction. This notice is effective immediately and will remain in effect until further notice.

(Dept. of State) (20 March 2003)

(7) SPECIAL WARNINGS. (Continued).

SPECIAL WARNINGS FOOTNOTE.
In January 1977, DMA now NGA commenced issuing warnings as NAVAREAS IV and XII broadcasts in addition to the HYDROLANT and HYDROPAC series.
(Supersedes NTM 1(7)03) (NGA/DEPT. OF STATE)

(8) TRADE WITH CUBA.

The President of the United States proclaimed an embargo February 7, 1962 on all trade with Cuba. Except as authorized by Department of Treasury regulations or license, all dealings in property in which Cuba or a Cuban national has an interest (including all financial transactions in Cuba) by any person subject to U.S. jurisdiction are prohibited. Unless otherwise authorized by the Department of Treasury, it is unlawful for any person subject to the jurisdiction of the United States to transport, import, or otherwise deal in or engage in any transaction with respect to any merchandise outside the United States if such merchandise: (1) is of Cuban origin; (2) is or has been located in or transported from or through Cuba; or (3) is made or derived in whole or part from any Cuban growth, produce, or manufacture. It is also unlawful for any person subject to U.S. jurisdiction to engage in any transportation of goods or merchandise from anywhere to Cuba unless the following conditions are met: (1) such transportation is licensed or otherwise authorized by Treasury; and (2) if U.S. goods or merchandise are involved, the exportation is itself licensed or otherwise authorized by the Department of Commerce under the provisions of the Export Administration Act of 1979, as amended. Licenses or authorizations to engage in such trade will not normally be granted. Certain exceptions exist for trade in informational materials. Unless licensed by Treasury, no vessel may enter a U.S. port for any purpose including bunkering or the acquisition of ship's stores if there are on board goods or passengers coming from, or going to, Cuba, or goods in which Cuba or a Cuban national has an interest. Unless licensed by Treasury, no vessel which enters a port or place in Cuba to engage in the trade of goods or services may, within 180 days of such vessel's departure from such port or place in Cuba, load or unload freight at any place in the United States. Persons who violate these restrictions may be subject to criminal or civil sanctions, or both, and vessels involved in such trade contrary to law may be subject to seizure and forfeiture (reviewed November 12, 1998).
(Repetition NTM 1(8)03) (DEPT. OF STATE)

(9) AMVER.

The Internet website for Amver is: www.amver.com. The Amver system, maintained and administered by the United States Coast Guard, with the cooperation of coast radio stations of many nations, is a global ship reporting system for search and rescue (SAR) which provides important aid to the development and coordination of SAR efforts in the offshore areas of the world. Vessels of all nations, on the high seas, are encouraged to voluntarily send movement (sailing) reports and periodic position reports to the Amver Center located in Martinsburg, West Virginia, via selected radio stations and coast earth stations.

Information from these reports is entered into a computer database which is used to generate and maintain dead reckoning positions. Characteristics of vessels which are valuable for determining SAR capability are also entered into the computer from available sources of information. Information concerning the predicted location and SAR characteristics of each vessel estimated to be within the area of interest is made available, upon request, only to recognized SAR agencies of any nation, or vessels needing assistance. Predicted locations are only disclosed for reasons related to maritime safety.

Messages sent within the Amver system are at no cost to the ship or owner. Benefits to shipping include: (1) improved chances of aid in emergencies, (2) reduced number of calls for assistance by vessels not favorably located to assist, and (3) reduced time lost by vessels responding to calls for assistance. An Amver participant is under no greater obligation to render assistance during an emergency than a vessel that is not participating.

Instructions on participation in the Amver system are usually available in the following languages: Chinese, Danish, Dutch, English, French, German, Greek, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Russian, Spanish, and Swedish. They are available from:

Amver Maritime Relations Office
USCG Battery Park Building
1 South Street
New York, New York 10004-1499
U.S.A.

(9) AMVER. (Continued).

Telephone: (212) 668-7762
Fax: (212) 668-7684
E-mail: RKenney@BatteryNY.uscg.mil

In addition to its Internet web page of www.amver.com other sources for Amver information include U.S. Coast Guard Area and District offices, Marine Inspection Offices, and Captain of the Port Offices in major U.S. ports. Requests for instructions should state the language desired if other than English.

Amver reports can be sent at no cost to the ship if sent via Inmarsat-C using the Amver/SEAS software and designated Telenor land earth stations. Necessary equipment includes an IBM PC or compatible with a 3.5 inch floppy disk drive and an Inmarsat-C mobile terminal with a 3.5 inch floppy disk drive and external port. Amver/SEAS software is available through Telenor Satellite Services, Inc., or can be downloaded from the Internet through the Amver web page or the National Oceanic and Atmospheric Administration web page at: http://seas.amverseas.noaa.gov/seas/seas.html.
(Supersedes NTM 1(09)03) (USCG)

(10) INTERNATIONAL AERONAUTICAL AND MARITIME SEARCH AND RESCUE (IAMSAR) MANUAL.

The International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual, Volume III, Mobile Facilities has replaced the Merchant Ship SAR Manual (MERSAR). IAMSAR Manual, Volume III, Mobile Facilities, is intended to be carried aboard rescue units, aircraft, and vessels to help with performance of a search, rescue, or on-scene coordinator function and with aspects of search and rescue that pertain to their own emergencies. This Manual can be purchased directly from IMO or from selected book sellers around the world as provided under “Publication Catalogue” on IMO web page: www.imo.org. It is available in the English, French, Russian, and Spanish languages.
(Repetition NTM 1(10)03) (USCG)

(11) SPECIAL REPORTING INSTRUCTIONS FOR U.S. FLAG VESSELS, VESSELS CARRYING WAR RISK INSURANCE, AND CERTAIN OTHER DESIGNATED VESSELS (Formerly USMER Vessels).

According to a U.S. Maritime Administration regulation effective 1 August 1983, U.S. flag vessels and foreign-flag “War Risk” vessels must report and regularly update their voyages to the Amver Center.

Who Must Report

A. U.S.-flag vessels of one thousand gross tons or more, operating in foreign commerce.
B. Foreign-flag vessels of one thousand gross tons or more, for which an Interim War Risk Insurance binder has been issued under the provisions of Title XXI, Merchant Marine Act, 1936.

Who May Report

Other merchant vessels, when approved by MARAD, whose owners may have chosen to participate and to have voyage information forwarded to MARAD. (Other merchant vessels may participate in Amver, but information provided by them will be released only for safety purposes or to satisfy certain advance arrival notification requirements of Title 33, Code of Federal Regulations.)

When to Report

A. Sailing plans may be sent days or even weeks prior to departure, but no later than departure.
B. Departure Report must be sent as soon as practicable upon leaving port.
C. Position Report must be sent within twenty-four hours of departure, and subsequently no less frequently than every forty-eight hours until arrival.
D. Arrival Report must be sent immediately prior to or upon arrival at the Port of Destination.
E. Reports are to be sent during the Radio Officer’s normal duty hours, but no later than the above schedule.
F. At the discretion of the vessel, reports may be sent more frequently than the above schedule, as, for example, in heavy weather or under other adverse conditions.

(Repetition NTM 1(11)03) (USCG)

(12) URGENCY AND SAFETY SIGNALS.

The radiotelephone urgency signal, which is the group of words PAN PAN (pronounced “Pahn-Pahn”) spoken three times, is provided for use in cases in which a ship making a call has a very urgent message to transmit concerning the safety of a ship, aircraft, or other vehicle, or the safety of a person, but it does not necessarily imply that the ship is in imminent danger or requires immediate assistance. The call has priority over all other communications except distress calls and it should be used in all urgent cases in which the sending out of the SOS or MAYDAY signal is not fully justified.

The urgency signal and message may be addressed to all stations or to a specific station. The urgency signal may also be used when the Master of a ship desires to issue a warning that circumstances are such that it may become necessary for him to send out the distress signal at a later stage. The message must be canceled as soon as any action is no longer necessary.

The radiotelephone SAFETY signal “SECURITE” (pronounced “SAY-CUR-I-TAY”) spoken three times, is provided for reporting hazards to navigation or meteorological warnings including dangers regarding ice, derelicts, tropical storms, etc.
(Repetition NTM 1(12)03) (USCG)

(13) SUBMARINE EMERGENCY IDENTIFICATION SIGNALS AND HAZARD TO SUBMARINES.

1. U.S. submarines are equipped with signal ejectors which may be used to launch identification signals, including emergency signals. Two general types of signals may be used: smoke floats and flares or stars. A combination signal which contains both smoke and flare of the same color may also be used. The smoke floats, which burn on the surface, produce a dense, colored smoke for a period of fifteen to forty-five seconds. The flares or stars are propelled to a height of three hundred to four hundred feet from which they descend by small parachute. The flares or stars burn for about twenty-five seconds. The color of the smoke or flare/star has the following meaning:
   a) GREEN-Used under training exercise conditions only to indicate that a torpedo has been fired or that the firing of a torpedo has been simulated.
   b) YELLOW-Indicates that submarine is about to come to periscope depth from below periscope depth. Surface craft terminate antisubmarine counter-attack and clear vicinity of submarine. Do not stop propellers.
   c) RED-Indicates an emergency condition within the submarine and that it will surface immediately, if possible. Surface ships clear the area and stand by to give assistance after the submarine has surfaced. In case of repeated red signals, or if the submarine fails to surface within reasonable time, she may be assumed to be disabled. Buoy the location, look for submarine buoy and attempt to establish sonar communications. Advise U.S. Naval authorities immediately.
   d) WHITE-Two white flares/smoke in succession indicates that the submarine is about to surface, usually from periscope depth (non-emergency surfacing procedure). Surface craft should clear the vicinity of the submarine.

2. A Submarine Marker Buoy consists of a cylindrically shaped object about 3 feet by 6 feet with connecting structure and is painted international orange. The buoy is a messenger buoy with a wire cable to the submarine; this cable acts as a downhaul line for a rescue chamber. The buoy may be accompanied by an oil slick release to attract attention. A submarine on the bottom in distress and unable to surface will, if possible, release this buoy. If an object of this description is sighted, it should be investigated and U.S. Naval Authorities advised immediately.

3. Transmission of the International Distress Signal (SOS) will be made on the submarine’s sonar gear independently or in conjunction with the red emergency signal as conditions permit.

4. Submarines may employ any or all of the following additional means to attract attention and indicate their position while submerged:
   a) Release of dye marker.
   b) Ejection of oil.
   c) Release of air bubble.
   d) Pounding on the hull.

5. United States destroyer-type vessels in international waters will, on occasion, stream a towed underwater object at various speeds engaged in naval maneuvers. All nations operating submarines are advised that this underwater object in the streamed condition constitutes a possible hazard to submerged submarines.

(Repetition NTM 1(13)03) (U.S. NAVY)

(14) RULES, REGULATIONS AND PROCLAMATIONS ISSUED BY FOREIGN GOVERNMENTS.

The National Geospatial-Intelligence Agency, as a means of promoting maritime safety, includes in its publications rules, regulations, and proclamations affecting navigation as issued by foreign nations.

In this connection, it should be clearly understood that the publication of such material is solely for information relative to the navigational safety of shipping, and in no way constitutes a legal recognition by the United States of the international validity of any rule, regulation, or proclamation so published. While every effort is made to publish all such information, the National Geospatial-Intelligence Agency cannot assume any liability for failure to publish any particular rule, regulation, proclamation, or the details thereof.
(Repetition NTM 1(14)03) (NGA/PTNM)

(15) WARNING-DANGER FROM SUBMARINE CABLES AND PIPELINES.

Submarine cables or pipelines pass beneath various navigable waterways throughout the world. Installation of new submarine cables and pipelines may be reported in the Notice to Mariners; their locations may or may not be charted. Where feasible, warning signs are often erected to warn the mariners of their existence. In view of the serious consequences resulting from damage to submarine cables and pipelines, vessel operators should take special care when anchoring, fishing or engaging in underwater operations near areas where these cables or pipelines may exist or have been reported to exist.

Certain cables carry high voltages; many pipelines carry natural gas under high pressure or petroleum products. Electrocution, fire or explosion with injury or loss of life or a serious pollution incident could occur if they are penetrated. Vessels fouling a submarine cable or pipeline should attempt to clear without undue strain. Anchors or gear that cannot be cleared should be slipped; no attempt should be made to cut a cable or pipeline.
(Repetition NTM 1(16)03) (USCG)

(16) CAUTION-CLOSE APPROACH TO MOORED OFFSHORE AIDS TO NAVIGATION.

Courses should invariably be set to pass these aids with sufficient clearance to avoid the possibility of collision. Errors of observation, current and wind effects, other vessels in the vicinity, and defects in steering gear may be, and have been, the cause of collisions. Experience shows that buoys cannot be safely used as leading marks to be passed close aboard, and should always be left broad off the course whenever sea room permits.

It should be borne in mind that most large buoys are anchored to a very long scope of chain and, as a result, the radius of their swinging circle is considerable. The charted position is the approximate location. Furthermore, under certain conditions of wind and current, they are subject to sudden and unexpected sheers which are certain to hazard a vessel attempting to pass close aboard.

Further warning on use of floating aids to navigation for position taking is contained in paragraph 1 of this Notice. When approaching an offshore light structure, large navigational buoy, or a station on a submarine site, on radio bearings, the risk of collision will be lessened by ensuring that the radio bearing does not remain constant.
(Repetition NTM 1(16)03) (USCG)

(17) PIPELINE LAYBARGES AND JETBARGES.

With the increased number of pipeline laying operations in the Gulf of Mexico and other areas, operators of all types of vessels should be aware of the dangers of passing close aboard, close ahead, or close astern of a jetbarge or pipelaying barge. Pipelaying barges and jetbarges usually move at 1/2 knot or less and have anchors which extend out approximately 3500-5000 feet in all directions, and may be marked by lighted anchor buoys. The exposed pipeline behind the pipelaying barge and the areas in the vicinity of anchors are hazardous to navigation and should be avoided. The pipeline and anchor cables also represent a submerged hazard to navigation. It is suggested, if safe navigation permits, for all types of vessels to pass well ahead of the pipelaying barge or well astern of the jetbarge. The pipelaying barge, jetbarge, and attending vessels may be contacted on VHF-FM Channel 16 for passage instructions.
(Repetition NTM 1(17)03) (USCG)

(18) REQUIRED REPORTING OF DAMAGED U.S. AIDS TO NAVIGATION.

It frequently occurs that aids to navigation are collided with, causing damage and displacement, or complete loss, without the knowledge of the Coast Guard District Commander. The replacement or repair of such aids is consequently often not made as promptly as desired. This situation results in diminished protection for marine traffic, and is attributable in large part to the failure of vessel operators to furnish notice of these collisions to the nearest local or district office of the U.S. Coast Guard, or to Coast Guard Headquarters, as required by law and regulation. The prompt submission of notice of any marine casualty or accident, including damage or destruction of aids to navigation, is required by the Marine Investigation Regulations, Section 4.05-20 of Title 46, Code of Federal Regulations, with penalty for noncompliance.
(Repetition NTM 1(18)03) (USCG)

(19) OIL POLLUTION-COMPLIANCE WITH THE CLEAN WATER ACT.

The Federal Water Pollution Control Act (FWPCA) prohibits the discharge of quantities of either oil or hazardous substances which may be harmful into or upon the navigable waters of the United States. This prohibition also applies to adjoining shorelines, waters of the contiguous zone, activities connected with the Outer Continental Shelf Lands Act (OSLA) and Deepwater Port Act of 1974, and such discharges which may affect natural resources belonging to the United States or under its exclusive management authority, including those resources under the Fishery Conservation and Management Act of 1976. Furthermore, in the event a spill does occur in violation of the Act the person in charge of a vessel or onshore or offshore facility is required to notify the Coast Guard as soon as he has knowledge of the spill. Such notification is to be by the most rapid means available to the National Response Center (1-800-424-8802, nationwide 24 hour number).
(Repetition NTM 1(19)03) (USCG)

(20) COMPLIANCE WITH THE ACT TO PREVENT POLLUTION FROM SHIPS.

The Act to Prevent Pollution from ships (33 U.S.C. 1901) implements into U.S. law the International Convention for the Prevention of Pollution from Ships, as modified by the Protocol of 1978 (MARPOL 73/78). Under the Act, the U.S. Coast Guard is responsible for inspecting and certifying that U.S. vessels meet the applicable requirements. Annex I of MARPOL 73/78 deals with oil and oily waste, Annex II with hazardous chemicals and other substances referred to as Noxious Liquid Substances (NLS), and Annex V deals with the prevention of marine pollution by plastics and other garbage produced during vessel operations.

Annex I of MARPOL 73/78 is applicable to oceangoing tankers over 150 gross tons and all other oceangoing ships over 400 gross tons. The MARPOL 73/78 requirements include oily waste discharge limitations, oily-water separating equipment, monitoring and alarm systems for discharges from cargo areas, cargo pump rooms and machinery space bilges. Ships to which Annex I MARPOL 73/78 is applicable are also required to have an International Oil Pollution Prevention (IOPP) Certificate verifying that the vessel is in compliance with the requirements of MARPOL 73/78 and that any required equipment is on board and operational. Vessels must also maintain an Oil Record Book recording all oil transfers and discharges. The Oil Record Book is available from the USCG Supply Center Baltimore or any local Captain of the Port.

Annex II of MARPOL 73/78 is applicable to oceangoing vessels and non-self propelled oceangoing ships which carry Noxious Liquid Substances (NLS) in bulk. The Annex II requirements include discharge restrictions for various classes of cargo residues; the maintenance of a Cargo Record Book for recording all NLS cargo and residue transfers and discharges; and a Procedures and Arrangements Manual describing the correct procedures for off loading and prewashing cargo tanks.

Annex II NLS cargoes are classified in one of four categories, A, B, C, or D. Category A is the most hazardous to the environment. Category A and other substances which tend to solidify in tanks must be prewashed in port under the supervision of a Prewash Surveyor prior to departure from the off loading terminal. Vessel discharges must be underwater when discharge at sea is allowed. Tanks which carry Category B and C NLS must be tested to ensure that after tank stripping only a minimal amount of residues will remain. Reception facilities must be able to assist in cargo stripping operations by reducing back pressure during the final stages of off loading.

Terminals and ports receiving oceangoing tankers, or any other oceangoing ships of 400 GT or more, carrying residues and mixtures containing oil, or receiving oceangoing ships carrying NLSs, are required to provide adequate reception facilities for the wastes generated. Coast Guard Captains of the Port issue a Certificate of Adequacy to terminals or ports to show that they

(20) COMPLIANCE WITH THE ACT TO PREVENT POLLUTION FROM SHIPS. (Continued).

are in compliance with federal reception facility requirements. An oceangoing tanker or any other oceangoing ship of 400 GT or more required to retain oil or oily residues and mixtures on board and an oceangoing ship carrying a Category A, B or C NLS cargo or NLS residue in cargo tanks that are required to be prewashed, may not enter any port or terminal unless the port or terminal holds a valid Certificate of Adequacy or unless the ship is entering under force majeure.

Annex V is applicable to all recreational, fishing, uninspected and inspected vessels, and foreign flag vessels on the navigable waters and all other waters subject to the jurisdiction of the United States, out to and including the Exclusive Economic Zone (200 miles).

Annex V prohibits the disposal of any and all plastic material from any vessel anywhere in the marine environment. Dunnage, lining and packing materials which float may be disposed of beyond 25 miles from the nearest land. Other garbage that will not float may be disposed of beyond 12 miles of land, except that garbage which can pass through a 25mm mesh screen (approximately 1 square inch) may be disposed of beyond 3 miles. Dishwater is not to be considered garbage within the meaning of Annex V when it is the liquid residue from the manual or automatic washing of dishes or cooking utensils. More restrictive disposal regimes apply in waters designated “Special Areas.” This Annex requires terminals to provide reception facilities at ports and terminals to receive plastics and other garbage from visiting vessels.

MARPOL 73/78 requires the immediate reporting of any unpermitted discharges of oil or other substances. The civil penalty for each violation of MARPOL 73/78 is not more than $25,000 per day. The criminal penalty for a person who knowingly violates the MARPOL Protocol, or the regulations (33 CFR 151, 155, 157, and 158), consists of a fine of not more than $250,000 and/or imprisonment for not more than 5 years; U.S. law also provides criminal penalties up to $500,000 against organizations which violate MARPOL.

International Safety Management (ISM) Code Implementation: Compliance with the ISM Code is mandatory for passenger ships, and oil and chemical tankers, gas carriers, bulks carriers, and cargo high speed craft over 500 Gross Ton engaged on international voyages. Other cargo ships and MODUs over 500 GT must comply by July 1, 2002. To demonstrate compliance, vessels must present copies of approved Documents of Compliance and Safety Management Certificates to Coast Guard Port State control Boarding Officers during routine compliance examinations. ISM compliance demonstrates that vessel operators have safety and environmental policies, emergency response procedures, designated accident and code non-conformity reporting procedures, and on board maintenance and operating manuals. If inbound vessels are not in compliance with ISM Code after the implementation dates of July 1, 1998 or 2002, they will be denied entry into U.S. waters.
(Repetition NTM 1(20)03) (USCG)

(21) PACKAGED MARINE POLLUTANTS-COMPLYING WITH MARPOL ANNEX III.

On October 1, 1993, new regulations under the Hazardous Materials Transportation Act (HMTA) took effect, implementing MARPOL Annex III in the United States. MARPOL Annex III deals with the prevention of marine pollution by harmful substances in packaged form.

Annex III of MARPOL 73/78 applies to all ships carrying harmful substances in packaged form. Annex III provides standards for stowage, packing, labeling, marking, and documentation of substances identified as marine pollutants in the International Maritime Dangerous Goods Code (IMDG Code). On 5 November 1992, the U.S. Research and Special Programs Administration (RSPA) amended the Hazardous Materials Regulations (HMR, 49 CFR 100-177) to list and regulate these marine pollutants in all modes of transportation. Under the HMR, marine pollutants are listed in a separate appendix, and a “marine pollutant mark” is required for those materials. The marine pollutant mark is used in addition to any existing labels or placards designating a hazardous substance.

Marine pollutants are divided into two classes: marine pollutants and severe marine pollutants. A solution or mixture containing 10% or more of any marine pollutant falls into the class of “marine pollutant.” The “severe marine pollutant” class consists of those materials that contain 1% or more of any specified “severe marine pollutant” substance. Marine pollutants that do not meet the criteria for any other hazard class are transported as an environmentally hazardous substance, solid or liquid, N.O.S. (class 9).
(Repetition NTM 1(21)03) (USCG)

(22) POLLUTION-OCEAN DUMPING.

The Marine Protection Research and Sanctuaries Act of 1972, as amended (33 USC 1401 et seq.), regulates the dumping of all material, except fish waste, into ocean waters. Radiological, chemical and biological warfare agents and other high level radioactive wastes are expressly banned from ocean disposal. The Army Corps of Engineers issues permits for the disposal of dredged spoils; the Environmental Protection Agency is authorized to issue permits for all other dumping activities. Surveillance and enforcement to prevent unlawful transportation of material for dumping or unlawful dumping under the Act has been assigned to the U.S. Coast Guard. The Act provides civil penalties of up to $50,000 and criminal penalties of up to $50,000 and/or one year imprisonment.
(Repetition NTM 1(22)03) (USCG)

(23) WARNING-POSSIBLE DANGER FROM UNLABELED INTERMODAL CONTAINERS AND DRUMS.

With the many exotic chemicals being transported in inter-modal freight containers and in drums as deck cargo, increasingly more reports are received regarding the loss overboard of these potentially dangerous cargo-carrying units. Empty containers and drums may contain residues which may be extremely hazardous to touch or smell, and vapors emanating from these packages may be explosive.

When encountering derelict inter-modal containers and drums, whether afloat or from the sea bottom, the dangers listed above should be considered. Identifying labels will give adequate warning, but containers and drums are more likely to be found with caution labels washed away. All inter-modal freight containers have unique identifying numbers, which should be included in any sighting report if visible from a safe distance. Avoid direct contact and notify U.S. Coast Guard of any sightings in U.S. coastal waters (24 HR TOLL FREE reporting number 1-800-424-8802), or government authorities of the nearest port state if sighting is near any foreign shores.
(Repetition NTM 1(23)03) (USCG)

(24) REPORTING OF DANGERS TO NAVIGATION.

Mariners will occasionally discover uncharted shoals, malfunctions of important navigational aids or other dangerous situations that should be made known to other navigators. Those items that can be classified as urgent should be reported by any rapid means to the closest responsible charting authority. The general criterion for important data is “that information, without which, a mariner might expose his vessel to unnecessary danger.” Reports to the U.S. Coast Guard and to foreign authorities can be made via radio using voice, SITOR and Digital Selective Calling (DSC), via TELEX, or via satellite using telephone and fax. Reports to NGA in Bethesda, MD can be made via Defense Messaging System (DMS) (NGA NAVSAFETY) message or AUTODIN (NGA NAVSAFETY BETHESDA MD) message, TELEX, telephone, fax and e-mail.

Guidance in preparing reports of dangers to navigation and specific radio frequencies, addresses and telephone numbers are contained in NGA Pub. 117, Radio Navigational Aids. Reports should be brief, but must contain:

What - Description of danger
When - GMT and date
Where - Latitude and Longitude (Reference chart in use.)
Who - Reporting vessel and observer

Additionally, mariners are requested to notify NGA of discrepancies in charts and publications, using the Marine Information Report and Suggestion Sheet found in the back of each Notice to Mariners.
(Supersedes NTM 1(24)03) (NGA/PTNM)

(25) VESSEL BRIDGE-TO-BRIDGE RADIOTELEPHONE REGULATIONS.

APPLICATION: These regulations contain watch and equipment requirements for VHF-FM Radiotelephone. The regulations apply to the following vessels (including recreational, uninspected, and military vessels) while underway on the navigable waters of the U.S. (e.g. on internal rivers and tributaries and seaward out to twelve nautical miles off the coast):
(1) Every power-driven vessel 20 meters or greater in length;
(2) Every vessel of 100 gross tons and upwards carrying one or more passengers for hire while navigating;
(3) Every towing vessel 26 feet or over in length while navigating; and

(25) VESSEL BRIDGE-TO-BRIDGE RADIOTELEPHONE REGULATIONS. (Continued).

(4) Every dredge and floating plant engaged in or near a channel or fairway in operations likely to restrict or affect navigation of other vessels except for an unmanned or intermittently manned floating plant under the control of a dredge.

WATCH ON CHANNEL 13: The master, operator, or whoever is designated to pilot the vessel, must maintain a listening watch on the designated bridge-to-bridge frequency while underway on the navigable waters of the United States. The designated frequency is VHF-FM Channel 13 (except on portions of the lower Mississippi River where Channel 67 is the designated frequency). The person maintaining the watch must also be able to communicate in English.

WATCH ON CHANNEL 16: In addition to the Channel 13 watch, vessels must keep a continuous watch on VHF-FM Channel 16 (International Distress and Calling Channel) while underway, or when participating in and monitoring a Vessel Traffic Service (VTS) Channel.

VOLUNTARY STATIONS: Vessels not subject to the Vessel Bridge-to-Bridge Regulations although not required to have a VHF-FM radio onboard, must maintain a watch on Channel 16 whenever the radio, if on board, is operating (i.e. energized) and is not being used to communicate on other channels.

PASSING ARRANGEMENTS: A vessel that reaches agreement with another vessel in a head-on, crossing, or overtaking situation, by using the radiotelephone as prescribed by the Vessel Bridge-to-Bridge Radiotelephone Act, is not obliged to sound the whistle signals prescribed by this rule, but may do so. If agreement is not reached, then whistle signals shall be exchanged in a timely manner and shall prevail (Inland Navigation Rule 34(h)).

Note: Such “passing arrangements” are not recognized under the International Regulations for Preventing Collisions at Sea (COLREGS).

MORE INFORMATION: The Vessel Bridge-to-Bridge Radiotelephone Regulations can be found in the Coast Guard publication Navigation Rules: International-Inland, (COMDTINST M16672.2D), additional VHF-FM Radiotelephone regulations can be found in Title 47, Part 80, Title 33, Part 26 of the Code of Federal Regulations, and Title 33, U.S. Code 1201 et seq. For questions, write to: Commandant (G-MWV), U.S. Coast Guard, 2100 2nd Street, SW, Washington, D.C. 20593-0001. Tel: (202) 267-0407 or visit: http://www.navcen.gov/mwv/navrules/navrules.htm.

(Supersedes NTM 1(25)03) (USCG)

(26) SEISMIC SURVEYS.

Details of seismic surveys may be broadcast to mariners via HYDROLANT, HYDROPAC, NAVAREA IV and NAVAREA XII broadcast systems. Surveys can be conducted without prior notification or broadcast warnings.

Survey vessels may operate alone or in company with other surface vessels or submersibles. Survey vessels may be towing cables in excess of 2 miles astern. Cables may be marked by buoys and may be towed on the surface or submerged.

During a survey, repeated shock waves are created by using explosive charges, compressed air, mechanical vibrators or by electrical means at any level from the bottom to the surface. Vessels surveying may be underway but sometimes are stopped for extended periods.

Seismic survey vessels which are unable to maneuver are required to carry the lights and signals described in Rule 27 of International Regulations for Preventing Collisions at Sea. These vessels should be given a wide berth.

Charges may be contained in a variety of cylinders, tubes, or bags which may not be marked as dangerous. No attempt to recover such items should be made. Any suspicious charge-like containers inadvertently taken aboard by trawls or any other means should be carefully handled and jettisoned immediately if possible.

(Repetition NTM 1(26)03) (NGA/PTNM)

(27) UNITED STATES-CAUTION REGARDING SUBMARINE OPERATIONS.

Boundary limits and designations of submarine operating areas are shown on the charts in magenta or purple lines. As submarines may be operating in these areas, vessels should proceed with caution. During torpedo practice firing, all vessels are cautioned to keep well clear of naval target vessels flying a large red flag where it may best be seen.

During the past a number of potentially dangerous incidents have occurred. Ships have entered Fleet Operating Areas in which UDT (Underwater Demolition Teams) or SEAL (Sea, Air, and Land) Teams were conducting scheduled operations from a submerged submarine. These operations were being conducted in a specific area assigned for that purpose. These submerged operations ordinarily involve transferring swimmers in and out of a submarine while submerged. In this situation, movements of the submarine must be restricted in course, speed, and depth. Furthermore, emergency surfacing could prove

(27) UNITED STATES-CAUTION REGARDING SUBMARINE OPERATIONS. (Continued).

hazardous and result in loss of life to swimmers. Therefore, when conducting operations of this type the submarine and swimmer detachment are relatively immobile and are helpless to evade approaching ships passing through their area. There is also a real danger that a well-intentioned ship, unaware of these operations, might turn in the submarine's direction to investigate rubber raft, swimmers, or submarine periscope.

Notice of date and time prior to any subsurface operations should be provided to Commander Submarine Force, U.S. Atlantic Fleet, 7958 Blandy Rd., Norfolk, VA 23551-2492.

(Repetition NTM 1(27)03) (U.S. NAVY)

(28) SPECIAL RULES WITH RESPECT TO ADDITIONAL STATION AND SIGNAL LIGHTS FOR NAVY SHIPS.

1. Man overboard lights.-Naval vessels may display, as a means of indicating man overboard, two pulsating, all around red lights in a vertical line located on a mast from where they can best be seen.
2. Yard arm signaling lights.-Naval vessels may display, as a means of visual signaling, white all around lights at the end of the yardarms. These lights will flash in varying sequences to convey the intended signal.
3. Aircraft warning lights.-Naval vessels may display, as a means of indicating the presence of an obstruction to low flying aircraft, one or two all around red lights on each obstruction.
4. Underway replenishment contour lights.-Naval vessels may display, as a means of outlining the contour of the delivery ship during night time underway replenishment operations, red or blue lights at deck edge extremities. These lights are being converted to blue, vice red, therefore either color may be seen until conversion is complete.
5. Minesweeping station keeping lights.-Naval vessels engaged in minesweeping operations may display, as an aid in maintaining a prescribed interval and bearing, two white lights in a vertical line visible from 070 through 290 degrees relative.
6. Submarine identification light.-Submarines may display, as a distinctive means of identification, an intermittently flashing amber beacon located where it can best be seen, as near as practicable, all around the horizon.
7. Special operations lights.-Naval vessels may display, as a means of coordinating certain operations, a revolving beam colored red, green or amber, located on either yardarm or mast platform from where it can be seen all around the horizon.
8. Convoy operations stern light.-Naval vessels may display, during periods of convoy operations, a blue light located near the stern, with the same characteristics as, but in lieu of, the normal white stern light.
9. Wake illumination light.-Naval vessels may display a white light located near the stern to illuminate the wake.
10. Flight operations lights.-Naval vessels engaged in night flight operations may display various arrangements of light systems containing combinations of different colored lights as a means of assisting in the launch and recovery of aircraft and enhancing flight safety. These light systems will be located at various points on the vessels, depending on the vessel type and nature or the flight operations being conducted.
11. Amphibious operations lights.-Naval vessels engaged in night amphibious operations may display various arrangements of light systems containing combinations of different colored lights as a means of assisting in the launch and recovery of assault craft and enhancing the safety of the amphibious operation. These light systems will be located at various points on the vessels, depending on the vessel type and the nature of the amphibious operations being conducted.
12. Minesweeping polarity signal lights.-Naval vessels engaged in minesweeping operations may display either a red or green light on each side of vessel.
13. Replenishment-at-sea floodlights.-Naval vessels engaged in replenishment-at-sea operations may display various arrangements of floodlights of different colors for general illumination of equipment, work areas, and cargo being transferred between ships. These lights will be located at various points on the vessels, depending on the vessel type and location of the replenishment-at-sea handling areas.
14. Replenishment-at-sea cargo transfer signal lights.-Naval vessels engaged in replenishment-at-sea operations may display one or more red light signal devices on the delivery side of the vessels. These devices display various combinations of lights to indicate type of cargo being transferred.
15. Replenishment-at-sea truck light.-Naval vessels engaged in replenishment-at-sea operations may display one or more red all-round light(s) located on a mast to assist the receiving vessel in approaching the delivery vessel.
16. Replenishment-at-sea lights.-Naval aircraft carriers and similar type vessels may display two all-round lights installed along the forward starboard flight deck edge to indicate the fore-and-aft axis when the aircraft carrier or similar type vessel is the delivery vessel.

(Repetition NTM 1(28)03) (U.S. NAVY)

(29) UNITED STATES NAVAL VESSELS-NAVIGATIONAL LIGHT WAIVERS-DISTINCTIVE LIGHTS AUTHORIZED FOR NAVAL VESSELS.

1. All ships are warned that, when U.S. Naval vessels are met on the high seas or on navigable waters of the United States during periods when navigational lights may be displayed; certain navigational lights of some naval vessels may vary from the requirements of the Regulations for Preventing Collisions at Sea, 1972, and rules applicable to the navigable waters of the United States, as to number, position, range of visibility or arc of visibility. These differences are necessitated by reasons of military function or special construction of the naval ships. An example is the aircraft carrier where the two masthead lights are considerably displaced to starboard from the center or keel line of the vessel when viewed from ahead. Certain other naval vessels cannot comply with the horizontal separation requirements of the masthead lights, and the two masthead lights on even larger naval vessels, such as some cruisers, will thus appear to be crowded together when viewed from a distance. Other naval vessels may also have unorthodox navigational light arrangements or characteristics when seen either underway or at anchor.
2. Naval vessels may also be expected to display certain other lights. These lights include, but are not limited to, different colored recognition light signals, and aircraft landing lights. These lights may sometimes be shown in combination with navigational lights.
3. During naval maneuvers, naval ships, alone or in company, may also dispense with showing any lights, though efforts will be made to display lights on the approach of shipping.
4. Naval vessels, except for aircraft carrier types (CV and CVN), may dispense with showing the masthead lights during operations or maneuvers in which the vessels are restricted in ability to maneuver.

(Supersedes NTM 1(29)03) (CNO)

(30) TRAFFIC SEPARATION SCHEMES, AREAS TO BE AVOIDED, AND RECOMMENDED TRACKS.

To increase the safety of navigation, particularly in converging areas of high traffic density, routes incorporating traffic separation have been adopted by the IMO in certain areas of the world. In the interest of safe navigation, it is recommended that through traffic use these schemes, as far as circumstances permit, by day and by night and in all weather conditions.

An area to be avoided is a routing measure comprising an area within defined limits, in which either navigation is particularly hazardous or it is exceptionally important to avoid casualties, and which should be avoided by all ships, or certain classes of ships.

Recommended tracks are routes, generally found to be free of dangers, which ships are advised to follow to avoid possible hazards nearby.

The International Maritime Organization (IMO) is recognized as the only international body responsible for establishing and recommending measures on an international level concerning ships' routing. In deciding whether or not to adopt or amend a traffic separation scheme, IMO will consider whether the scheme complies with the design criteria for traffic separation schemes and with the established methods of routing. IMO also considers whether the aids to navigation proposed will enable mariners to determine their position with sufficient accuracy to navigate the scheme in accordance with Rule 10 of the International Regulations for Preventing Collisions at Sea (72 COLREGS).

General principles for navigation in traffic separation schemes are as follows:

1. A ship navigating in or near a traffic separation scheme adopted by IMO shall in particular comply with Rule 10 of the 72 COLREGS to minimize the development of risk of collisions with another ship. The other rules of the 72 COLREGS apply in all respects, and particularly the steering and sailing rules if risk of collision with another ship is deemed to exist.
2. Traffic separation schemes are intended for use by day and by night in all weather, ice-free waters or under light ice conditions where no extraordinary maneuvers or assistance by icebreaker(s) is required.
3. Traffic separation schemes are recommended for use by all ships unless stated otherwise. Bearing in mind the need for adequate underkeel clearance, a decision to use a traffic separation scheme must take into account the charted depth, the possibility of changes in the sea-bed since the time of last survey, and the effects of meteorological and tidal conditions on water depths.
4. A deep water route is an allied routing measure primarily intended for use by ships which require the use of such a route because of their draft in relation to the available depth of water in the area concerned. Through traffic to which the above consideration does not apply should, if practicable, avoid following deep water routes. When using a deep water route mariners should be aware of possible changes in the indicated depth of water due to meteorological or other effects.
5. The arrows printed on charts merely indicate the general direction of traffic; ships should not set their courses strictly along the arrows.
6. Vessels should, so far as practicable, keep clear of a traffic separation line or separation zone.

(30) TRAFFIC SEPARATION SCHEMES, AREAS TO BE AVOIDED, AND RECOMMENDED TRACKS. (Continued).

7. Vessels should avoid anchoring in a traffic separation scheme or in the area near its termination.
8. The signal "YG" meaning "You appear not to be complying with the traffic separation scheme" is provided in the International Code of Signals for appropriate use.
   NOTE.-Several governments administering traffic separation schemes have expressed their concern to IMO about the large number of infringements of Rule 10 of the 72 COLREGS and the dangers of such contraventions to personnel, vessels and environment. Several governments have initiated surveillance of traffic separation schemes for which they are responsible and are providing documented reports of vessel violations to flag states. As in the past, the U.S. Coast Guard will investigate these reports and take appropriate action. Mariners are urged to comply at all times with the 72 COLREGS and, in particular, Rule 10 when operating in or near traffic separation schemes.
9. Notice of temporary adjustments to traffic separation schemes for emergencies or for accommodation of activities which would otherwise contravene Rule 10 or obstruct navigation may be made in Notices to Mariners. Temporary adjustments may be in the form of a precautionary area within a traffic lane, or a shift in the location of a lane.
10. The IMO approved routing measures which affect shipping in or near U.S. waters are:

UNITED STATES TRAFFIC SEPARATION SCHEMES

In the Approaches to Portland, Maine
In the Approaches to Boston, Massachusetts
In the Approaches to Narragansett Bay, Rhode Island and Buzzards Bay, Massachusetts
Off New York
Off Delaware Bay
In the Approaches to Chesapeake Bay
In the Approaches to Galveston Bay
In the Approaches to Los Angeles-Long Beach
In the Santa Barbara Channel
Off San Francisco
In the Strait of Juan de Fuca and its Approaches
In Puget Sound and its Approaches
In Prince William Sound, Alaska

UNITED STATES AREAS TO BE AVOIDED

Off Washington Coast
In the region of Nantucket Shoals
At Louisiana Offshore Oil Port (LOOP) in the Gulf of Mexico
In the region of the Northwest Hawaiian Islands
Adjacent to Florida Keys
In the region of the Channel Islands, California

(Repetition NTM 1(30)03) (IMO/USCG/NGA)

(31) FIRING DANGER AREAS.

Firing and bombing practice exercises take place either occasionally or regularly in numerous areas established for those purposes along the coast of practically all maritime countries.

In view of the difficulty in keeping these areas up to date on the charts, and since the responsibility to avoid accidents rests with the authorities using the areas for firing and/or bombing practice, these areas will not as a rule be shown on NGA charts.

National Ocean Service Charts show firing and bombing practice areas as defined by Code of Federal Regulations (Title 33, Part 334) in United States waters.

Any permanent aid to navigation that may be established to mark a danger area, or any target, fixed or floating, that may constitute a danger to navigation, will be shown on the appropriate charts.

Warning signals, usually consisting of red flags or red lights, are customarily displayed before and during the practice, but the absence of such warnings cannot be accepted as evidence that a practice area does not exist. Vessels should be on the lookout for local warnings and signals, and should, whenever possible, avoid passing through an area in which practice is in progress, but if compelled to do so should endeavor to clear it at the earliest possible moment.

(Repetition NTM 1(31)03) (NGA/PTNM)

(32) LORAN INFORMATION.

Loran-C is a long-range hyperbolic radionavigation system using at least three land based radio transmitters (90 to 110 kHz frequency band) and receivers to allow mariners, aviators, and land based navigators to determine their position. Twenty-four Loran-C stations provide position information accurate to less than 0.25 nautical miles for the continental U.S. and most of Alaska. The U.S. Coast Guard operates Loran-C chains in cooperation with Canada and Russia. The accuracy of Loran-C will vary depending on capability of user equipment and location to transmitting stations. Loran-C nautical chart coverage can be found in the National Geospatial-Intelligence Agency Catalog of Maps, Charts, and Related Products, Part 2-Hydrographic Products, Nautical Charts and Publications (NGA Stock Number CATP2V01U). Tabular information for Loran-C Rate Publications is no longer available.
(Supersedes NTM 1(32)03) (USCG/NGA)

(33) ENDANGERED SPECIES (WHALES AND SEA TURTLES) EASTERN SEABOARD.

NOAA's National Marine Fisheries Service, Office of Protected Resources has advised that several species of endangered whales and endangered and threatened sea turtles inhabit areas along the Eastern Seaboard. Among these is the northern right whale, the world's most endangered large whale species, and collisions with ships are a significant source of mortality in this species. Collisions with whales can also result in significant damage to vessels, most commonly involving bent shafts or damaged propellers. Sea turtles are also susceptible to vessel collision because they surface to breathe and may rest at or near the surface. Nearshore habitat as well as natural and maintained channels may provide food, shelter and migration corridors to sea turtles. Sea turtles also associate with offshore oceanographic fronts and the warm water of the Gulf Stream.

Right whales are vulnerable to vessel collisions. As discussed below, right whales are seasonally abundant in waters off Florida, Georgia, New England and Canada. Right whale advisories and sighting locations are available for these areas via Coast Guard Broadcast Notice to Mariners, NAVTEX and other media.

There are about 300 northern right whales in the North Atlantic, and the species is listed as endangered under the Endangered Species Act. Right whales are highly vulnerable to vessel collisions because they can be difficult to spot, often do not move out of the way of approaching ships, and mate, rest, feed, and nurse their young at the surface.

Right whales occur along the east coast from calving areas off southern Georgia and northern Florida to feeding and mating areas off Massachusetts, in the Gulf of Maine and Bay of Fundy. In the Northeast United States, right whales occur seasonally in Cape Cod Bay (peak season: January through April), the Great South Channel (peak season: April through June), Stellwagen Bank (peak season: January through April), Jeffreys Ledge (peak season: July through mid-December), and the Bay of Fundy (Grand Manan Basin) (peak season: June through December). The first two areas are Federally-designated right whale critical habitats. Stellwagen Bank and Jeffreys Ledge are located in the Federally-designated Gerry E. Studds Stellwagen Bank National Marine Sanctuary. The Grand Manan Basin is a Canadian whale conservation area. Other whale species are present in spring and summer. Juvenile humpback and fin whales frequent near shore waters of the mid-Atlantic year round and are particularly abundant off Virginia and North Carolina in winter. Other whale species are present primarily in spring and summer. Sea turtles occur in coastal waters of Maine through Virginia in summer and fall (May through November).

In the Southeast United States, coastal waters off Georgia and northeastern Florida is the only known calving area for right whales. This area is a Federally-designated right whale critical habitat. The calving season is generally December through March. In March and April, right whales accompanied by calves migrate northward, often within 20 miles of the coast. Juvenile humpback and fin whales frequent near shore waters of the mid-Atlantic year round and are particularly abundant off Virginia and North Carolina during winter. Sea turtles occur year round from North Carolina through Florida; however, they are especially abundant during the spring and summer, just prior to and during the mating season.

Vessel operators should be particularly alert to avoid hitting or disturbing right whales. In seasons and in areas that right whales may occur, vessel operators should maintain a sharp lookout. Field identification cues include a broad back with no dorsal fin, irregular bumpy white patches (callosities) on the head, and a distinctive two-column V-shaped blow. They have paddle-like flippers nearly as wide as they are long, and a broad, deeply notched tail. Right whales reach lengths of 45 to 55 feet and are black in color.

(33) ENDANGERED SPECIES (WHALES AND SEA TURTLES) EASTERN SEABOARD. (Continued).

Two of the best documented ship strikes involved whales being struck and killed by vessels steaming at 15 knots. One vessel was steaming in clear weather and calm seas, just before dusk, and well off the Mid-Atlantic coast, when a small group of whales surfaced about 50 yards off the starboard bow. A juvenile in the group was struck by the ship's propellers and killed. The second vessel was steaming in thick fog, inshore off the southeast coast in early January, when it struck a juvenile, apparently dead-on.

Seasonal right whale advisories and sighting reports are broadcast periodically for these areas by Coast Guard Broadcast Notice to Mariners, NAVTEX, NOAA Weather Radio, Cape Cod Canal Vessel Traffic Control, the Bay of Fundy Vessel Traffic Control, and other means. As weather and conditions permit, a dedicated seasonal program of over flights and vessel surveys are done in Cape Cod Bay and the Great South Channel and from the Savannah River, Georgia south to Sebastian Inlet, Florida. However, many right whales go undetected. Consult *Coast Pilots* for the U.S. East Coast and nautical charts for information on the boundaries of right whale critical habitat and precautionary measures that mariners can take to reduce the likelihood of ship strikes.

To address the problem of ship strikes, NOAA and the U.S. Coast Guard have established a Mandatory Ship Reporting System in the above-mentioned right whale critical habitats. As of July 1, 1999, the system requires all commercial ships 300 gross tons or greater to report to a shore-based station when entering the two habitat areas and provide their name, call sign, course, speed, location, destination and route (see following table). In return, ships will receive an automated message indicating that the ship is entering an area critical for right whales, that whales are likely to be in the area and that ship strikes are a serious threat to whales and may cause damage to the ship. Advice on precautionary measures mariners can take to reduce the possibility of hitting right whales and recent sighting locations are also included. The reporting system requires reporting only and will affect no other aspect of vessel operation. For information about how and when to report, consult Coast Guard Local Notice to Mariners (No. 27/99) and an interim final rule (64 FR 29229) and a final rule (66 FR 5806, 20 November 2001) which provides the regulations. Please note that a change has been made in the reporting procedures since publication of the interim final rule. Vessels must now include an additional paragraph (M), before paragraph (A), which provides the vessel's Inmarsat number. Additional information on the revised reporting procedures may be obtained at the following website:
http://www.nmfs.noaa.gov/prot_res/PR2/Conservation_and_Recovery_Program/msr/msrhome.html

This table identifies requirements for reporting to the mandatory ship reporting system. The change noted above in the requirements is indicated in the first line.

Paragraph	Function	Information Required
System name	System Identifier	Ship reporting system (WHALESNORTH or WHALESSOUTH).
M	Inmarsat number	Vessel Inmarsat number.
A	Ship	Vessel name and call sign.
B	Date, time, and month of report	Six digit group giving day of month and time, single letter indicating time zone, and three letters indicating month.
E	True course	3-digit indicating true course.
F	Speed in knots and tenths	3-digit group indicating knots and tenths
H	Date, time, and point of entry into system	Date and time expressed as in (B) and latitude and longitude expressed as a four digit group giving latitude, the letter N indicating north, followed by a /, a five digit group giving longitude, and the letter W indicating west.
I	Destination and ETA	Name of port and arrival time expressed as in (B).

(33) ENDANGERED SPECIES (WHALES AND SEA TURTLES) EASTERN SEABOARD. (Continued).

Paragraph	Function	Information Required
L	Route information	Route information should be reported as direct rhumbline to port (RL) and intended speed or a series of way points (WP). Vessels reporting waypoints should include latitude and longitude, expressed as in (H), and intended speed between waypoints. For vessels transiting within a traffic separation scheme (TSS), give only the WP on entry and departure of TSS.

The National Marine Fisheries Service recommends the following precautionary measures be taken to reduce the risk of colliding with northern right whales when transiting right whale critical habitat:

1. Consult with local pilots' associations for precautionary measures when transiting right whale critical habitat 1. As soon as possible prior to entering right whale critical habitat areas.
2. As soon as possible prior to entering right whale critical habitat, check Coast Guard Broadcast Notice to Mariners, NAVTEX, the Coast Pilot, local pilots, and other sources for recent right whale sighting reports. In the northern critical habitat area, mariners should also check NOAA Weather Radio, Cape Cod Canal Vessel Traffic Control, and the Bay of Fundy Vessel Traffic Control.
3. To the extent possible, review right whale identification materials and maintain a sharp watch with lookouts familiar with spotting whales.
4. When planning passage through a right whale critical habitat, attempt to avoid night-time transits and, when practical, minimize the distance traveled through the area. Anticipate delays due to whale sightings. When planning passage along the southeast coast during calving season (between 15 November and 15 April), attempt to avoid transit through critical habitat area by remaining offshore, and minimize travel distances through the critical habitat when entering or leaving port. When the ability to spot whales is limited (e.g., night, fog, rain), reduced speed may minimize the risk of colliding with a right whale.
5. Traveling at speeds in excess of 14 knots may increase the likelihood of striking a whale. It is recommended that where possible, and when trip planning allows, ships travel less than 14 knots.
6. If a right whale is reported within 20 nautical miles of a ship's position, post a lookout familiar with spotting whales, exercise caution, and proceed at a safe speed, bearing in mind that reduced speed may minimize the risk of a ship strike.
7. Do not assume right whales will move out of your way. Right whales are generally slow moving and seldom travel faster than 5-6 knots. Consistent with safe navigation, maneuver around observed right whales or recently reported sighting locations. Federal regulation prohibits the approach within 500 yards of any right whale anywhere in the U.S. Atlantic EEZ. The same regulations have been implemented in the State of Massachusetts.
8. Any whale accidentally struck, any dead whale, or any whale observed entangled in fishing gear should be reported immediately to the Coast Guard on VHF channel 16 noting the precise location, date, and time of the accident or sighting. In the event of a strike or sighting, amplifying information such as the speed of the vessel, size of the vessel, water depth, wind speed and direction, description of the impact, fate of the whale, species, and size should be reported if known.
9. Right whales can occur anywhere along the east coast. Therefore, mariners are urged to exercise prudent seamanship with regard to right whales at all times when transiting the U.S. East Coast.

(Repetition NTM 1(33)03) (NOAA)

(34) REPORTING DEPTH INFORMATION.

The many ships presently equipped with reliable depth recorders constitute a potential wealth of sounding data desired by charting agencies for the purpose of confirming charted depths or charting heretofore unknown depths. While oceanographic survey vessels remain the primary source of bathymetric data, depth recordings submitted by navy, coast guard and merchant vessels will make an important contribution to the vital task of charting the oceans.

Mariners are encouraged to obtain and report soundings whenever bridge routine and equipment capabilities will allow. The American Practical Navigator (Bowditch) (NVPUB9), Sections 2911-2916 describes the bathymetric requirements and provides some guidance for observing and reporting sonic soundings. However, soundings must be correlated to positions and accompanied by supportive data such as:

(34) REPORTING DEPTH INFORMATION. (Continued).

(a) Detailed position/time information.
(b) Mariner's own evaluation of positional accuracy (type of navigational system used and frequency of fixes).
(c) Ship's course and speed with time of changes noted.
(d) Echogram scales in use and graduated scales provided, with time of scale changes.
(e) Draft of vessel and whether zero reference is corrected for draft.
(f) Regular annotations of date/time marks on echograms to enable correlation with positions.
(g) State of the tide and weather conditions.
(h) Other related information considered appropriate.

An uncharted depth of 15 fathoms/28 meters or less should be considered an urgent danger to navigation, and should be reported via radio without delay. Follow up with substantiating evidence, including the echogram, track chart and/or position log and all relevant navigational data and forward to NGA at the earliest opportunity.

Charts submitted to amplify a sounding report will be replaced, on request, with a new chart, except that foreign charts will be replaced with the equivalent U.S. chart, if available. Data reports and charts should be sent to the National Geospatial-Intelligence Agency, Attn: PTNM, MS D-44, 4600 Sangamore Road, Bethesda, MD 20816-5003, either directly by mail or via any U.S. Consulate.
(Repetition NTM 1(34)03) (NGA/PTNM)

(35) WARNING-MINED AREAS.

Mines of various types and ages pose a threat to navigation in many parts of the world. Once mined, an area can never be certified to be completely danger free. Sweeping produces only statistical probability of protection. Mines may still remain, having failed to respond to orthodox sweeping methods. Some swept areas have not been covered by modern surveys and may contain uncharted wrecks, shoals or other dangers to navigation.

Prudent seamanship in former mine fields, swept channels and swept areas includes:
(a) Transit using only established routes or buoyed channels.
(b) Avoid shallow water. Sweeping techniques often preclude sweeping in restricted waters.
(c) Avoid fishing, trawling or any other form of submarine or seabed activity.
(d) Mariners are advised to anchor with caution only in established anchorages.
(e) Consult local authorities and regulations.
(Repetition NTM 1(35)03) (U.S. NAVY)

(36) MINED AREAS REPORTED.

Minefields-Tarabulus, Libya.

In early 1973 Libya reported that the following areas had been mined. Although these areas are probably no longer a mine threat, they still represent a potential hazard to navigation. The areas reported by Libya are bounded by lines joining the following positions:

1. (a) 32°52'48"N., 13°24'30"E.
   (b) 32°57'42"N., 13°24'30"E.
   (c) 32°57'42"N., 13°18'00"E.
   (d) 32°53'48"N., 13°22'18"E.

2. (a) 32°53'42"N., 13°20'36"E.
   (b) 32°55'54"N., 13°18'00"E.
   (c) 32°55'54"N., 13°15'00"E.
   (d) 32°54'30"N., 13°15'00"E.

(Repetition NTM 1(36)03) (U.S. NAVY)

(37) MINESWEEPING-CAUTION-ATTENTION IS CALLED TO THE FOLLOWING INSTRUCTIONS.

Minesweeping Operations:

(a) United States vessels engaged in minesweeping operations or exercises are hampered to a considerable extent in their maneuvering powers. Other Vessels Must Keep Clear of Minesweepers (COLREGS 1972).
(b) With a view to indicating the nature of the work on which they are engaged, these vessels will show the signals hereinafter mentioned. For the public safety, all other vessels, whether steamers or sailing craft, must endeavor to keep out of the way of vessels displaying these signals and not approach them inside the distances mentioned herein, especially remembering that it is dangerous to pass between the vessels of a pair or group sweeping together.
(c) All vessels towing sweeps are to show:
BY DAY.-A black ball at the fore mast and a black ball at the end of each fore yard.
BY NIGHT.-All around green lights instead of the black balls, and in a similar manner.
(d) Vessels or formations showing these signals are not to be approached nearer than 1,000 meters on either beam and vessels are not to cross astern closer than 1,000 meters. Under no circumstances is a vessel to pass through a formation of minesweepers.
(e) Minesweepers should be prepared to warn merchant vessels which persist in approaching too close by means of any of the appropriate signals from the International Code of Signals.
(f) In fog, mist, falling snow, heavy rainstorms, or any other conditions similarly restricting visibility, whether by day or night, minesweepers while towing sweeps when in the vicinity of other vessels will sound signals for a vessel towing (1 prolonged blast followed by 2 short blasts).

Helicopters Conducting Minesweeping Operations:

(a) The United States is increasingly employing helicopters to conduct minesweeping operations or exercises. When so engaged, helicopters, like vessels, are considerably hampered in their ability to maneuver. Accordingly, surface craft approaching helicopters engaged in minesweeping operations should take safety precautions similar to those described in (b) and (d) above with respect to minesweeping vessels.
(b) Helicopters towing minesweeping gear and accompanying surface escorts, if any, will use all available means to warn approaching ships of the operations or exercises being conducted. Also, measures will be taken where practicable to mark or light the gear or objects being towed.
(c) Minesweeping helicopters are equipped with a rotating beacon which has selectable red and amber modes. The amber mode is used during towing operations to notify/warn other vessels that the helicopter is towing. While towing, the helicopter's altitude varies from 15 to 95 meters above the water and speeds vary from 0 to 30 knots.
(d) General descriptions and approximate dimensions for towed minesweeping gear currently being used in conjunction with helicopters are as follows:
    (1) Mechanical sweep gear consisting, in part, of large lengths of submerged cables and explosive cutters. The only items normally visible on the surface are three to five international orange floats, depending upon the quantity of gear in use, which generally define the dimensions of the tow. The maximum width is 100 meters and the maximum distance behind the helicopter is 600 meters.
    (2) Acoustical sweep device weighing approximately 70 pounds. This device is towed behind the helicopter on a 250-meter orange polypropylene tow cable. When dead in the water, the gear will rise to the surface, supported by a yellow float.
    (3) A hydrofoil platform containing equipment used for magnetic influence sweeping. The platform is towed on the end of a 140-meter cable and trails electrodes in the water which extend 185 meters behind the platform. Very often, the aforementioned acoustical sweep device is towed in conjunction with this platform by attaching it to the end of one of the electrodes by a 30-meter polypropylene tow line. In this configuration, the total length of the tow is 215 and 350 meters, respectively, behind the hydrofoil platform and helicopter. Special care must be exercised when crossing astern of the hydrofoil platform as the towed cable is barely visible, and the attached acoustic device is submerged just beneath the surface and is not visible to surface vessels.
    (4) Helicopters employed in minesweeping operations and their tows may function during the day, and in various types of weather conditions. The major danger to any surface vessel is getting the various cables wrapped in its screws. Small craft also are subject to the risk of collision with the hydrofoil platform.

(Repetition NTM 1(37)03) (U.S. NAVY)

(38) UNITED STATES-EXPLOSIVE ORDNANCE-WARNING-GENERAL.

The continental shelf of the United States contains many forms of unexploded ordnance (military weapons), and while some ordnance hazard areas are designated, many unexploded ordnance locations are not known. The types most likely to be encountered are underwater ordnance (weapons) such as torpedoes, mines, depth charges, and aerial bombs, but other ordnance items may be found. In general, any metallic object having fins, vanes, propellers, horns, or possibly plates screwed or bolted to an external surface should be regarded as dangerous. This warning is published for all shipmasters, trawlers, fishermen, divers or persons conducting operations on or near the ocean bottom, and provides instructions on the action to be taken when ordnance items or suspicious objects are encountered:

(1) OBJECTS SNAGGED OR NETTED: Any object which cannot be immediately identified as a non-explosive (inert) item MUST BE TREATED AS AN EXPLOSIVE ITEM. If in any doubt about its identity, TREAT IT AS EXPLOSIVE. Non-explosive naval ordnance items such as practice torpedoes and practice mines will normally be painted bright orange, for ready identification. Any object which is not painted orange may be dangerous and possibly can explode if brought on board or bumped in any way. If an object is brought to the surface of the water and it cannot be immediately identified as an inert item, DO NOT ATTEMPT TO BRING IT ON BOARD OR ALONGSIDE. If possible, release the object immediately and radio the nearest Navy or Coast Guard activity giving position and description of the object. If the object cannot be released, or freed by cutting net or line, the following actions are advised:
   (a) stream object as far aft as possible;
   (b) notify nearest Navy or Coast Guard activity and stand by for instructions or help;
   (c) position crew at forward end of vessel, keeping deckhouse between them and the object astern; exposed personnel should remain under cover if possible;
   (d) maintain steerageway as necessary to stay in the area until help or instructions arrive.

   If unable to stand by while waiting for instructions because of deteriorating weather or sea conditions or other uncontrollable factors, keep the Navy or Coast Guard activity informed of your vessel's position AND AVOID POPULATED AREAS, OTHER VESSELS, OR SHORE- OR SEA-BASED STRUCTURES.

(2) OBJECTS BROUGHT ON BOARD: If a suspected explosive object is not detected until trawl or net contents have been discharged on board the vessel, take the following actions:
   (a) avoid any bump or shock to the object;
   (b) secure it in place against movement;
   (c) keep it covered up and wet down;
   (d) radio nearest Navy or Coast Guard activity and standby for instructions.

   If unable to stand by while waiting for instructions because of deteriorating weather or sea conditions or other uncontrollable factors, keep the Navy or Coast Guard activity informed of your vessel's position AND AVOID POPULATED AREAS, OTHER VESSELS, OR SHORE-OR SEA-BASED STRUCTURES.

(3) FLOATING OBJECTS: If a floating object cannot be readily identified as non-explosive, IT MUST BE CONSIDERED TO BE EXPLOSIVE. DO NOT APPROACH, OR ATTEMPT TO RECOVER OR BRING ON BOARD. Report location immediately to the nearest Navy or Coast Guard activity and warn all other ships or craft in the vicinity. Try to keep the object in sight until instructions are received.

(4) NAVAL MINES: Naval mines constitute a risk to shipping, fishing, underwater exploration, and other maritime interests. The different types of mines, the conditions under which they are most likely to be sighted, and the recommended action are as follows:

   FLOATING MINES- Consider all floating mines to be live and dangerous. DO NOT TOUCH OR APPROACH. The possibility of drifting mines being camouflaged with seaweed or other innocent appearing floating objects should be borne in mind and avoiding action taken. The following procedures and precautions are recommended:

   GROUND MINES- ON THE HIGH SEAS. Report the location of the mine by the most rapid means as soon as circumstances permit, this report is to be similar to that required for any hazard to navigation (See para 5). Mines sighted in anchorage areas or other patrolled water should, if circumstances permit, be kept under observation and reported to the nearest Navy or Coast Guard activity (See para 5). The recovery or handling of the mine should be done only by qualified explosive ordnance disposal personnel. If a mine is drifting down on a vessel at anchor and it cannot be avoided by other means, it is recommended that a stream of water from a fire hose be played near the mine to force it away from the vessel. WARNING: Mines may explode if a stream of water is played near them. Exposed personnel should remain under cover until danger is past.

(38) UNITED STATES-EXPLOSIVE ORDNANCE-WARNING-GENERAL. (Continued).

MOORED MINES- Moored mines may sometimes be seen several feet under the surface if the water is clear, or the mine may be floating on the surface. Often several mines or even a long row of the mines can be seen. Usually the sighting of one or more such mines indicates the presence of a minefield. Approaching the general vicinity of such mines is dangerous and should not ordinarily be undertaken by vessels. When mines are sighted, the location of the mines should be determined as accurately as possible, the area should be buoyed if this is feasible, all ships in the vicinity should be warned, and the appropriate Navy or Coast Guard activity should be notified immediately. Ground mines are normally laid in water so deep that they will not be seen unless the water is very clear. However, in very clear water with a hard white sand bottom, even a camouflaged mine can often be located because of the long, regular shadow it casts. The sighting of such a mine may indicate a minefield in the neighborhood. Approaching the general vicinity of such a mine is very dangerous. If a mine is sighted, the location should be determined as accurately as possible and buoyed, all ships in the vicinity should be warned, and the appropriate Navy or Coast Guard activity should be notified immediately.

BEACHED MINES- Any of the above types of mine may be found on the beach, either thrown up by the waves or mislaid by aircraft. Any mine found beached or floating close inshore should be reported at once to the nearest Navy, Coast Guard, military, or civil authority, and the mine should be kept under guard until the arrival of responsible authorities. No person except qualified explosive ordnance disposal personnel should be allowed closer than 400 yards.

(5) REPORTING OF SUSPICIOUS OBJECTS RESEMBLING MINES: Ships frequently report objects resembling mines but give insufficient information to properly evaluate the reports. As a result, needless time and expense is incurred only to find that they are not mines but other floating objects. HOWEVER, VESSELS SHOULD NOT ATTEMPT TO RECOVER OBJECTS RESEMBLING MINES OR PASS CLOSE ABOARD FOR POSITIVE IDENTIFICATION-KEEP WELL CLEAR. Since mines are a danger to life and property at sea, masters of ships sighting unidentified or suspicious objects are requested to furnish the following information to the nearest Navy or Coast Guard radio station or activity:

(a) Position of object, and how closely it was approached.
(b) Size, shape, condition of painting, and the presence of marine growth.
(c) Whether or not horns or rings are attached.
(d) Whether or not definite identification possible.

(Repetition NTM 1(38)03) (U.S. NAVY)

(39) CAUTION-OIL WELL STRUCTURES IN WATERS CONTIGUOUS TO THE U.S. AND ITS TERRITORIES.

Caution should be exercised when navigating in the waters contiguous to the U.S. and its territories particularly in the Gulf of Mexico, Santa Barbara Channel, California, and Cook Inlet, Alaska, in order to avoid collision with oil well structures and their associated mooring piles, anchor and mooring buoys, etc.

In general, oil well structures can be identified at night by the display of one or more quick flashing white or red lights, however, ships can expect to encounter unlighted structures as well. Structures may be equipped with a fog signal consisting of a horn sounding one 2-second blast every 20 seconds. Submerged wells may be marked by lighted or unlighted buoys.

Shipping safety fairways have been established through the concentration of oil wells in the Gulf of Mexico and Santa Barbara Channel. Mariners are encouraged to use these fairways and should avoid anchoring within a safety fairway. Certain areas adjacent to shipping safety fairways have been charted as fairway anchorages.

(Repetition NTM 1(39)03) (USCG)

(40) CAUTION REGARDING APPROACH OF SINGLE VESSELS TOWARD NAVAL FORMATIONS AND CONVOYS.

A formation of warships or a convoy is more difficult to maneuver than a single ship. Therefore, the attention of masters is called to the danger of all concerned which is caused by a single vessel approaching a formation of warships or convoy so closely as to involve risk of collision, or attempting to pass ahead of, or through such a formation or convoy. All ships are therefore cautioned to employ the customary manners of good seamanship and, where there is ample sea room, adopt early measures to keep out of the way of a formation of warships or convoy. The fact that in the interests of safety a single vessel should keep out of the way of a formation or convoy does not entitle vessels sailing in company to proceed without regard to

(40) CAUTION REGARDING APPROACH OF SINGLE VESSELS TOWARD NAVAL FORMATIONS AND CONVOYS. (Continued).

the movements of the single vessel. Vessels sailing in formation or convoy should accordingly keep a careful watch on the movements of any single vessel approaching the squadron or convoy and should be ready, in the case the single vessel does not keep out of the way, to take such action as will best aid to avert collision.
(Repetition NTM 1(40)03) (U.S. NAVY)

(41) NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY DISTRIBUTION SYSTEM.

GENERAL INFORMATION AND CUSTOMER ORDERING GUIDANCE.

DEFENSE SUPPLY CENTER RICHMOND PRODUCT CENTER 9 (DSCR-JN).

The DSCR Product Center 9 Branch (DSCR-JNB), is available to assist customers during normal duty hours, Monday through Friday, 0630 to 1700 EST. After hours messages are recorded for processing on the next business day. The office can respond to inquires regarding catalog usage, ordering procedures, product availability, disposition of excess stock, subscriptions and many other GGI&S related activities and interests.

Mailing Address:
Defense Supply Center Richmond
ATTN: DSCR-JNB
8000 Jefferson Davis Highway
Richmond, VA 23297-5335

Message Address:
DSCR RICHMOND VA//DSCR-JNB//
DSN: 695-6500; Fax: 695-6510
Tel: (804) 279-6500; Fax: (804) 279-6510
Toll Free: 1-800-826-0342
E-mail: pc9@dscr.dla.mil
Website: www.dscr.dla.mil/pc9/

After Normal Duty Hours and Crisis Support
Pager-DSCR-JN Duty Officer: Tel. (804) 279-6500
DSN 695-6500

NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY (NGA) CUSTOMER HELP DESK.

The NGA Customer Help Desk is available to assist customers with general questions about NGA products and services. U.S. customers may call from 0600 to 1800 CST, Monday through Friday, toll free at 1-800-455-0899. U.S. and OCONUS customers may call DSN: 490-5032; Tel: (314) 260-5032: DSN: Fax: 490-5024, Tel: Fax: (314) 260-1128; (E-mail: chdesk@nga.mil).

OBTAINING NGA NAUTICAL CHARTS AND PUBLICATIONS.

DoD customers should refer to the ordering procedures contained in the applicable volume or bulletin of the NGA Catalog. Requests for NGA products from non-DoD U.S. Government Agencies are on a reimbursable basis.

(1) CHARTS

As of 1 October 1992, the public sale of NGA aeronautical and nautical charts and related publications was transferred to the U.S. Department of Transportation, Federal Aviation Administration, National Aeronautical Charting Office (NACO).

Public sale customers may purchase NGA aeronautical and nautical charts from:

FAA, National Aeronautical Charting Office
Distribution Division, AVN-530
6303 Ivy Lane, Suite 400
Greenbelt, MD 20770

(41) NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY DISTRIBUTION SYSTEM. (Continued).

Telephone: 1-800-638-8972 (Within the U.S. only)
Telephone: (301) 436-8301
Fax: (301) 436-6829
E-Mail: 9-AMC-Chartsales@faa.gov
Website: http://naco.faa.gov

(2) PUBLICATIONS

As of 1 October 2000, the public sale of all new editions of NGA nautical publications was transferred to the U.S. Government Printing Office (GPO) for both wholesale and retail purposes. All subsequent wholesale agreements for NGA nautical publications must be established with the GPO Superintendent of Documents (GPO SuDocs). Publications may be ordered any time through the U.S. Government Online Bookstore at http://bookstore.gpo.gov or by fax at (202) 512-2250, or by telephone Monday through Friday from 7:30 a.m. to 9:00 p.m. ET at (202) 512-1800 or toll free at 1-866-512-1800. Mail orders including payment are sent to:

U.S. Government Printing Office
Superintendent of Documents
P.O. Box 371954
Pittsburgh, PA 15250-7954

(Supersedes NTM 1(41)03) (NGA/NOAA)

(42) INTERNATIONAL HYDROGRAPHIC ORGANIZATION (IHO).

The International Hydrographic Organization (IHO) was originally established in 1921 as the International Hydrographic Bureau (IHB), the present name having been adopted in 1970 as a result of a revised international agreement between the member nations. However, the former name, International Hydrographic Bureau, was retained for the IHO's administrative body of three Directors and a small Staff at the Organization's headquarters in Monaco.

The IHO sets forth hydrographic standards as they are agreed upon by the member nations. All Member States are urged and encouraged to follow these standards in their surveys, nautical charts and publications. As these standards are uniformly adopted, the products of the world's hydrographic and oceanographic offices become more uniform. Much has been done in the field of standardization since the Bureau was founded.

The principal work undertaken by the IHO is:

(a) To bring about a close and permanent association between national hydrographic offices;
(b) To study matters relating to hydrography and allied sciences and techniques;
(c) To further the exchange of nautical charts and documents between hydrographic offices of Member Governments;
(d) To circulate the appropriate documents;
(e) To tender guidance and advice upon request, in particular to countries needing technical assistance while engaged in setting up or expanding their hydrographic service;
(f) To encourage coordination of hydrographic surveys with relevant oceanographic activities;
(g) To extend and facilitate the application of oceanographic knowledge for the benefit of navigators;
(h) To cooperate with international organizations and scientific institutions which have related objectives.

During the 19th century, many maritime nations established hydrographic offices to provide means for improving the navigation of naval and merchant marine vessels by providing nautical publications, nautical charts and other navigational services. Non-uniformity of hydrographic procedures, charts and publications was much in evidence. In 1889, an International Marine Conference was held at Washington, D.C., and it was proposed to establish a "permanent international commission." Similar proposals were made at the sessions of the International Congress of Navigation held at St. Petersburg in 1908 and again in 1912.

In 1919 the hydrographers of Great Britain and France cooperated in taking the necessary steps to convene an international conference of hydrographers. London was selected as the most suitable place for this conference and on July 24, 1919, the First International Conference opened, attended by the hydrographers of 24 nations. The object of the conference was clearly stated in the invitation to attend. It read, "To consider the advisability of all maritime nations adopting similar methods in the preparation, construction, and production of their charts and all hydrographic publications; of rendering the results in the most

(42) INTERNATIONAL HYDROGRAPHIC ORGANIZATION (IHO). (Continued).

convenient form to enable them to be readily used; of instituting a prompt system of mutual exchange of hydrographic information between all countries; and of providing an opportunity for consultations and discussions to be carried out on hydrographic subjects generally by the hydrographic experts of the world." In general, this is still the purpose of the International Hydrographic Organization. As a result of the conference, a permanent organization was formed and statutes for its operations were prepared. The International Hydrographic Bureau, now the International Hydrographic Organization, began its activities in 1921 with 18 nations as members. The Principality of Monaco was selected as the headquarters because of its easy communication with the rest of the world and also because of the generous offer of Prince Albert I of Monaco to provide suitable accommodations for the Bureau in the Principality. The IHO, including the 3 Directors and their staff, is housed in its own headquarters which were built and are maintained by the Government of Monaco.

Officers and enlisted men of naval vessels and masters, mates or navigating personnel of merchant ships, including pleasure craft, are welcome to visit the Bureau's Office at 4 quai Antoine 1er, Monte-Carlo.

The works of the IHO are published in both French and English and distributed through various media. Many of the publications are available to the general public, and a discount of 30 percent is offered to naval or merchant marine officers of any of the member nations. Inquiries as to the availability of the publications should be made directly to the "International Hydrographic Bureau, 4 quai Antoine 1er, B.P. 445, MC 98011 MONACO CEDEX, Principality of Monaco."

In order that the work of the IHO may be reviewed and future plans developed, conferences are held every five years. They are attended by delegates from member nations.

Presently, the following nations are Member States of the International Hydrographic Organization:

Algeria
Argentina
Australia
Bahrain
Bangladesh
Belgium
Brazil
*Bulgaria
*Burma
Canada
Chile
China
Colombia
Congo, Democratic Republic of the
Croatia
Cuba
Cyprus
Denmark
Dominican Republic
Ecuador
Egypt
Estonia
Fiji
Finland
France
Germany
Greece
Guatemala
Iceland
India
Indonesia
Iran
Italy
Jamaica
Japan
*Kuwait
Malaysia
*Mauritania
*Mauritius
Mexico
Monaco
Morocco
Mozambique
Netherlands
New Zealand
Nigeria
North Korea
Norway
Oman
Pakistan
Papua New Guinea
Peru
Philippines
Poland
Portugal
*Qatar
Russia
Serbia and Montenegro
Singapore
*Slovenia
South Africa
South Korea
Spain
Sri Lanka
Suriname
Sweden
Syria
Thailand
Tonga
Trinidad and Tobago
Tunisia
Turkey
Ukraine
United Arab Emirates
United Kingdom
United States
Uruguay
Venezuela

* Membership of IHO pending

(Supersedes NTM 1(42)03) (IHO)

(43) INTERNATIONAL DISTRESS SIGNALS.

1. All seamen should be familiar with the international distress signals and procedures, both for recognition purposes and for self-reliance in the event of distress where captain and officers may have been incapacitated.

2. Short range distress signals, limited to range of visibility or audibility are:
   (a) "SOS" signal made by any audio or visual means.
   (b) International Code of Signals "NC".
   (c) Hoisting any square flag with a ball or anything resembling a ball, above or below it.
   (d) Flames made visible (as a burning oil barrel).
   (e) A rocket parachute flare or hand held flare showing a red light.
   (f) Rockets or shells, throwing red stars fired one at a time at short intervals.
   (g) Orange smoke, as emitted from a distress flare.
   (h) A gun or other explosive signal fired at intervals of about one minute.
   (i) A continuous sounding of any fog-signal apparatus.
   (j) Slowly and repeatedly raising and lowering arms outstretched to each side.

3. Radio distress signals via radiotelephone:
   (a) For a MF/HF radiotelephone tuned to 2182 kHz, send the radiotelephone alarm signal (if available).
   (b) Set equipment to the MF distress frequency 2182 kHz (or VHF-FM radiotelephone set to Channel No. 16 (156.800 MHz), and transmit the spoken word "MAYDAY" repeated three times followed by "this is" and then the name of the vessel repeated three times. Do not wait for acknowledgment. Continue by stating the nature of the distress; the kind of assistance desired; the position; and any other information which might facilitate the rescue. Wait a few moments for acknowledgment. Then, if none, repeat the entire distress message until acknowledged. Speak the distress message clearly and unhurried. Non-acknowledgment is not definite indication that the message was not received by someone.

4. For radio distress signals via Inmarsat ship earth station:
   (a) Select either the telex or telephone mode of operation and place a distress call to the nearest rescue coordination center (RCC) in accordance with the ship-earth station manufacturer's instructions. Note that communications over the satellite terminal may be interrupted during a ship casualty if terminal and antenna are not connected to a source of emergency power.
   (b) Section 359 (d) of the United States Communications Act provides that: "No charge shall be made by any ship or station in the mobile service of the United States for the transmission of distress messages and replies thereto in connection with situations involving the safety of life and property at sea." The FCC interprets this to apply equally to maritime mobile satellite systems.

5. For radio distress signals via digital selective calling: The distress call should be composed to include ship's position information, the time at which the position was taken, and the nature of distress. If the DSC radio is connected to a navigation receiver, position and time-of-position should already be included. The distress call should be transmitted on VHF Channel 70 (156.525 MHz), 2187.5 kHz, or the HF frequencies 4207.5, 6312, 8414.5, 12577 and 16804.5 kHz. An acknowledgment of the distress call should be received on the DSC frequency. Once an acknowledgment has been received, the radio distress procedures via radiotelephone (above) should be followed on the associated voice channel: VHF Channel 16 (156.800 MHz), 2182, 4125, 6215, 8291, 12290 and 16420 kHz. For DSC distress calls on VHF Channel 70 and 2187.5 kHz, the radio distress procedures via radiotelephone should be followed on the associated voice channel if an acknowledgment is not received after a reasonable time (30 sec to 5 min).

6. Simple to follow instructions for the operation of auto alarms, radiotelephone, DSC and satellite communications equipment should be conspicuously posted in the radio rooms of all ships. Procedures outlined here are purposely brief. Complete information on emergency radio procedures is contained in Chapter 4 of Radio Navigational Aids (Pub. 117). The nearest U.S. Coast Guard rescue coordination center MUST be notified whenever an inadvertent distress alert is transmitted.

(Repetition NTM 1(43)03) (IMO/USCG)

(44) WORLDWIDE NAVIGATIONAL WARNING SERVICE (WWNWS).

The Worldwide Navigational Warning Service (WWNWS) was established in 1977 through the joint efforts of the International Hydrographic Organization (IHO) and the International Maritime Organization (IMO). The WWNWS is a coordinated global service for the promulgation by radio of information on hazards to navigation which might endanger international shipping.

The basic objective of the WWNWS is the timely promulgation by radio of information of concern to the ocean-going navigator. Such information includes the following: failure and/or changes to major navigational aids, newly discovered wrecks or natural hazards including icebergs in or near main shipping lanes, hazardous military operations and areas where search and rescue, anti-pollution operations and cable-laying or other underwater activities are taking place.

Because of the wide ocean coverage of the WWNWS broadcasts, consideration is also being given to its selective use to augment other services for promulgating information concerning overdue and missing ships and aircraft.

For purposes of the WWNWS, the world has been divided into 16 Navigation Warning Areas (NAVAREAS) (see graphic page, I-1.37). Within each NAVAREA one national authority, designated the Area Coordinator, has assumed responsibility for the coordination and promulgation of warnings. Designated “National Coordinators” of other coastal states in a NAVAREA are responsible for collecting and forwarding information to the Area Coordinator. In the Baltic, a Sub-Area Coordinator has been established to filter information prior to passing to the Area Coordinator.

Coordinators are responsible for the exchange of information as appropriate with other coordinators, including that which should be further promulgated by charting authorities in Notice to Mariners.

The language used is English, although warnings may also be transmitted in one or more of the official languages of the United Nations.

Broadcast schedules appear in an Annex to the International Telecommunication Union “List of Radio-determination and Special Service Stations”, Volume II, and in the lists of radio signals published by various hydrographic authorities (in the U.S., Pub. 117). Transmissions usually occur frequently enough during the day to fall within at least one normal radio watch period, and the information is repeated with varying frequency as time passes until either the danger has passed or the information on it has appeared as a Notice to Mariners. Transmission of information over the WWNWS will continue to be affected by the advent of services such as NAVTEX.

A document giving guidance and information on the WWNWS is available free from the International Hydrographic Bureau, 4 quai Antoine 1er, B.P. 445, MC 98011 MONACO CEDEX, Principality of Monaco.

The comments and recommendations of mariners are earnestly desired to allow improvements to be made both to individual NAVAREA broadcasts and to the overall system. To facilitate such comments, a post card (individual broadcast) report form and a single page (multiple broadcast) report form have been prepared and are available from the IHB. The reporting forms are preaddressed to the Chairman of the IHO Commission which oversees the WWNWS, but may be forwarded to a specific Area Coordinator at the mariner’s option. The report forms request, in addition to general comments, information on the date, ship’s position, station (with call sign) monitored, and the broadcast’s scheduled frequency, language used, adherence to broadcast schedule (frequency and time) and quality of signal (strength, readability). Cooperation of the mariner in reporting such information is urged.

(44) WORLDWIDE NAVIGATIONAL WARNING SERVICE. (WWNWS). (Continued).

NAVAREA I (United Kingdom)
United Kingdom Hydrographic Office
Admiralty Way
Taunton, Somerset
TA1 2DN, United Kingdom
Phone: 44 1823 723316
Fax: 44 1823 322352
E-mail: rnwuser@ukhorn.u-net.com
Website: www.hydro.gov.uk

Baltic Sea Sub-Area NAVAREA I (Sweden)
Swedish Maritime Administration
BALTICO
S-601 78 Norrkoping, Sweden
Phone: 46 11 19 10 45
Fax: 46 11 23 89 45 (07-15 UTC)
46 8 601 79659 (15-07 UTC)
Telex: 64320 BALTICO S (07-15 UTC)
16060 STORDO S (15-07 UTC)
E-mail: ntm.baltico@sjofartsverket.se
Website: www.sjofartsverket.se

NAVAREA II (France)
Monsieur le Directeur
EPSHOM
13 Rue du Chatellier
BP 30316
29603 BREST CEDEX, France
Phone: 33 2 98 22 16 67
Fax: 33 2 98 22 14 32
E-mail: coord.navarea2@shom.fr
Website: www.shom.fr

NAVAREA III (Spain)
Instituto Hidrografico de la Marina
Plaza De San Severiano, 3
11007 Cadiz, Spain
Phone: 34 956 59 94 09
Fax: 34 956 59 93 96
Telex: 76102 MARIH E/76147 MEDCO E
E-mail: ihmesp@retemail.es

NAVAREAS IV AND XII (United States)
National Geospatial-Intelligence Agency
Attn: PTNM (Mail Stop D-44)
4600 Sangamore Road
Bethesda, MD 20816-5003
USA
Phone: 301 227 3147,
Fax: 301 227 3731
Telex: 898334 NGA USA
E-mail: navsafety@nga.mil
Website: www.pollux.nss.nga.mil

NAVAREA V (Brazil)
Diretoria de Hidrografia e Navegacao
Rua Barao de Jaceguay S/N°
Ponta da Armacao
24048-900 Niteroi–RJ Brazil
Phone: 55 21 2620 0073/2613 8210
Fax: 55 21 2613 8210/2620 7291
E-mail: 331@chm.mar.mil.br
segnav@chm.mar.mil.br
Website: www.dhn.mar.mil.br

NAVAREA VI (Argentina)
Servicio de Hidrografia Naval
Avenida Montes de Oca 2124
C 1270ABB Buenos Aires
Argentina
Phone: 54 11 4303 2298/4301 0061/4301 0067
Fax: 54 11 4303 2299/4301 2249
E-mail: snautica@hidro.gov.ar
Website: www.hidro.gov.ar

NAVAREA VII (Republic of South Africa)
Hydrographic Office
Private Bag X1, Tokai
7966 Cape Town
Republic of South Africa
Phone: 27 21 787 2445/2408
Fax: 27 21 787 2228
E-mail: hydrosan@iafrica.com
Website: www.sanho.co.za

NAVAREA VIII (India)
National Hydrographic Office of India
Post Box No. 75
107-A Rajpur Road
Dehradun 248001, India
Phone: 91 135 2747360/2747365
Fax: 91 135 2748373
Telegram: HYDRO DEHRADUN
E-mail: nho@sancharnet.in
Website:www.hydrobharat.org

NAVAREA IX (Pakistan)
Hydrographer of the Pakistan Navy
Hydrographic Department
Naval Headquarters
11, Liaquat Barracks
Karachi 75530, Pakistan
Phone: 92 021 48506151/48506152
Fax: 92 021 48506360/9203246
Telex: 20774 HDRO PK/54019 NAV PK
E-mail: hydropk@bol.edu.pk
Website: www.paknavy.gov.pk/hydro

(44) WORLDWIDE NAVIGATIONAL WARNING SERVICE. (WWNWS). (Continued).

NAVAREA X (Australia)
RCC Australia
AusSAR, Australian Maritime Safety Authority
GPO Box 2181
Canberra ACT 2601, Australia
Phone: 61 2 6230 6811
Fax: 61 2 6230 6868
E-mail: rccaus@amsa.gov.au
Website: www.amsa.gov.au

NAVAREA XI (Japan)
Notices to Mariners Division
Hydrographic and Oceanographic Department
Japan Coast Guard
5-3-1, Tsukiji
Chuo-ku, Tokyo 104-0045, Japan
Phone: 81 3 3541 3812/3817
Fax: 81 3 3542 7174
Telex: 2522222 JAHYD J
E-mail: tuho@jodc.go.jp
Website: www1.kaiho.mlit.go.jp/jhd-E.html

NAVAREA XIII (Russian Federation)
Department of Navigation and Oceanography
8,11 Liniya, B–34
St. Petersburg 199034, Russia
Phone: 7 812 213 81 09
Fax: 7 812 323 75 48
Telex: 121531 NAVIO RU
Telegram: St. PETERSBURG HYDROGRAPHIA
E-mail: gunio@homepage.ru

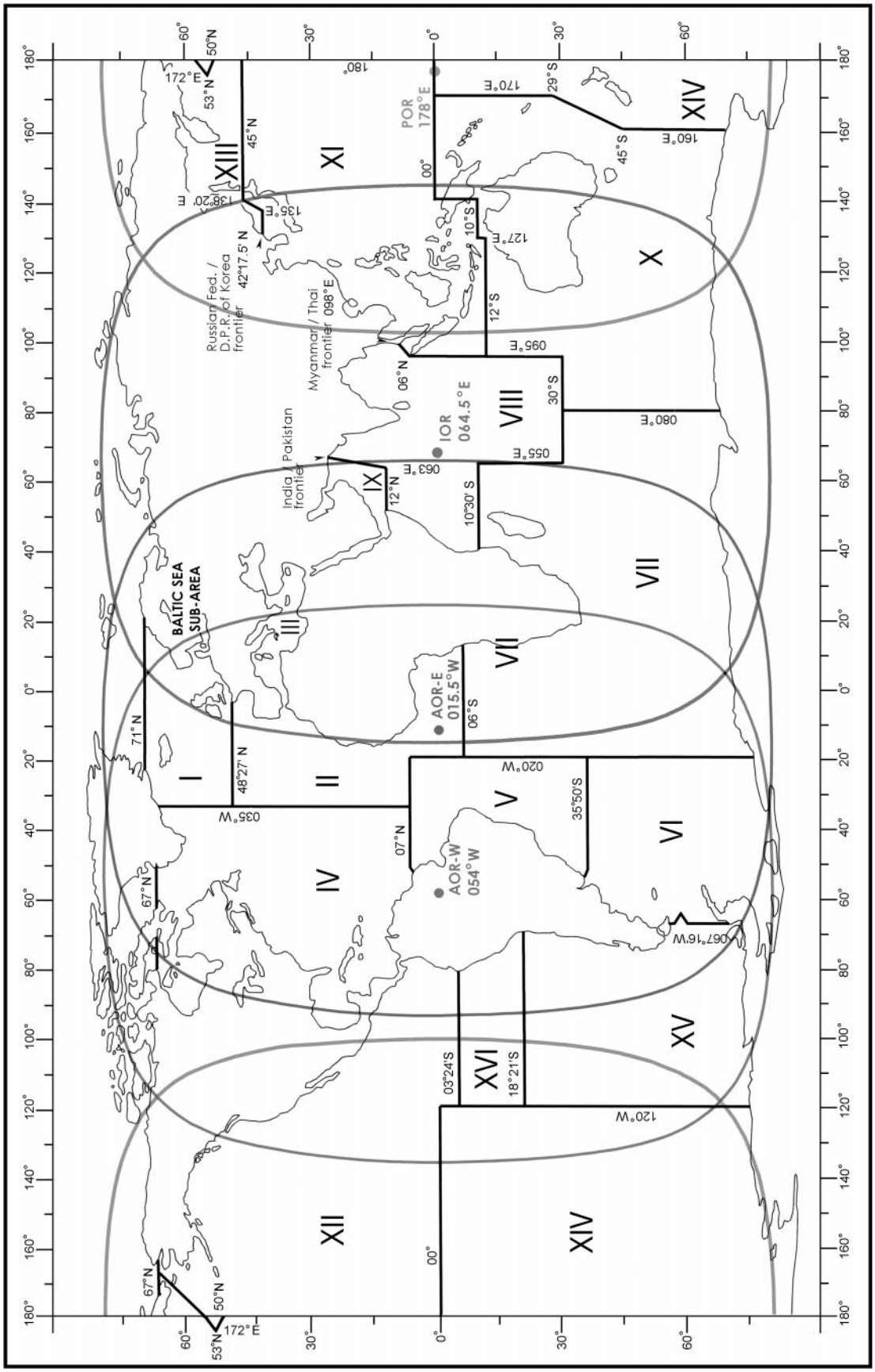
NAVAREA XIV (New Zealand)
NZDF Joint Geospatial Support Facility
HMNZ Naval Base
Private Bag 32-901, Devonport
Auckland 9, New Zealand
Phone: 64 9 445 5644
Fax: 64 9 445 5589
E-mail: brian.twyman@nzdf.mil.nz
Website: www.hydro.linz.govt.nz

NAVAREA XV (Chile)
Director del Servicio Hidrografico y Oceanografico
Armada de Chile
Casilla 324, Valparaiso, Chile
Phone: 56 32 266666
Fax: 56 32 266542/266706
E-mail: shoa@shoa.cl
Website: www.shoa.cl

NAVAREA XVI (Peru)
Direccion de Hidrografia y Navegacion de la Marina
Avenida Gamarra No. 500
Chucuito, Callao 1, Peru
Phone: 51 1 465 8312/429 6019/429 9063
Fax: 51 1 465 2995
E-mail: dihidronav@dhn.mil.pe
Website: www.dhn.mil.pe/

Chairman, IHO Commission on Promulgation
of Radio Navigational Warnings
4 quai Antoine 1er
B.P. 445
MC 98011 MONACO CEDEX
Principality of Monaco

(Supersedes NTM 1(44)03) (IMO/NGA)


BALTIC SEA SUB-AREA
POR 178°E
IOR 064.5°E
AOR-E 015.5°W
AOR-W 054°W
Russian Fed. / D.P.R. of Korea frontier
Myanmar / Thai frontier
India / Pakistan frontier
I
II
III
IV
V
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VII
VIII
IX
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XV
XVI

(45) WEATHER OBSERVATION REPORTS.

All ships are encouraged to participate in the international Voluntary Observing Ship (VOS) program. For information, and to arrange assistance from a U.S. National Weather Service Port Meteorological Officer (PMO) contact:

Voluntary Observing Ship Program
NOAA/NWS National Data Buoy Center (W/OPS52)
Building 3203, Room 305B
Stennis Space Center, MS 39529-6000
Telephone: (228) 688-1457, (228) 688-1768
Fax: (228) 688-3923, (228) 688-3153
E-mail: robert.luke@noaa.gov or david.mcshane@noaa.gov
Website: http://www.vos.noaa.gov

Details on the coding and transmission of weather observations may be found in “Observing Handbook No. 1” provided to ships participating in the U.S. VOS program. The U.S. VOS program also makes available a PC software program known as AMVER/SEAS which greatly assists in coding and transmitting VOS observations and AMVER position reports.

Detailed information on the dissemination of National Weather Service marine products including radiofax, such as frequency and scheduling information may be found in NGA Publication 117, the British Admiralty List of Radio Signals Volume 3(2), and at http://www.nws.noaa.gov/om/marine/home.htm (includes links to products).

GENERAL INSTRUCTION FOR REPORTING WEATHER OBSERVATIONS

CODED WEATHER MESSAGES: All weather report messages by radio or Inmarsat will be coded in World Meteorological Organization (WMO) ship synoptic code FM13-IX.

STANDARD SYNOPTIC OBSERVATION TIMES: The regular synoptic hours for reporting are 0000, 0600, 1200, and 1800 UTC. However, watch schedules and other ship functions sometimes make it impractical to meet the synoptic weather reporting schedule. Weather observations may also be submitted at the intermediate hours of 0300, 0900, 1500, and 2100 UTC. These should be reported as soon as possible, but no later than three (3) hours after the synoptic observation time.

TIMELINESS AND REPORT VALUE: All weather reports should be transmitted as soon as possible to the National Weather Service. Weather reports can be ingested by computer forecast models for only for a limited time after the reporting hour. Major computer programs are run at all synoptic hours and a few programs are run every three (3) hours. Forecasters look at, and use, all timely reports in making their forecasts and warnings.

SPECIAL WEATHER OBSERVATIONS

TROPICAL STORMS/HURRICANES: Hurricane season has been designated May 15 through November 30 because of the number of tropical storms and hurricanes during the period. Many special programs are in operation during this season and it is requested that the observation schedule, when in the vicinity of a tropical storm or hurricane, be set to transmit weather reports at least every three (3) hours (00, 03, 06, 09, etc.). Hourly reports when within a storm (winds over 48 knots) would be very helpful, if ship routine permits.

SPECIAL REQUESTS FOR OBSERVATIONS: The U.S. National Weather Service may request ships located in areas of suspected storm development to take special observations at more frequent intervals than the routine six (6) hourly synoptic observation times. If your ship happens to be in such an area, your report will be helpful even though conditions may not appear bad enough to warrant a special observation.

OBSERVATIONS DURING STORM CONDITIONS: Whenever TROPICAL STORM, TYPHOON, or HURRICANE conditions are encountered anywhere, “SAFETY OF LIFE AT SEA CONVENTION," Chapter V, requires all ships to take special observations and transmit the report to the closest national meteorological service via the most convenient radio or Inmarsat station. In addition to this requirement, it is highly desirable that weather reports be transmitted hourly, if possible; but in any case, not less frequently than every three (3) hours.

EXTRATROPICAL STORMS: Submit a weather report message as soon as the average wind equals or exceeds 48 knots. Report at least every three (3) hours when under STORM conditions.

COASTAL REPORTS: The weather starts changing as soon as the air moves from land out over the water. Ship weather reporting should continue as close to the coast as ship routine permits. When within 200 miles of the U.S. and Canadian coastlines, reports are requested every three (3) hours.

(45) WEATHER OBSERVATION REPORTS. (Continued).

TRANSMISSION OF WEATHER REPORTS

Below is a summary of the primary means by which VOS observations are transmitted to the National Weather Service. Details on these and other available transmission services may be found in “Observing Handbook No. 1.”

SITOR OR SINGLE SIDEBAND WEATHER REPORTS THROUGH THE U.S. COAST GUARD: As the usual call up includes “I have weather for you” type of information, no address (i.e., OBS METEO WASHDC) is necessary. The U.S. Coast Guard automatically transmits weather reports only to the National Weather Service. When acknowledged, start the message with the group BBXX followed by the ship's call sign and proceed with the numbers of the report. Some U.S. Coast Guard radio stations will accept weather reports by voice over single sideband radio. The procedures are the same as above. Phonetically pronounce the group BBXX, the ship's call sign, and then proceed with the numbers of the report.

INMARSAT: Follow the instructions with your Inmarsat terminal for sending a telex message. Use the special dialing code 41 (except when using the Amver/SEAS software in compressed binary format with Inmarsat-C), and do not request a confirmation. Here is a typical procedure for using an Inmarsat transceiver:

1. Select appropriate Land Earth Station Identity (LES-ID). (See table below.)
2. Select routine priority.
3. Select duplex telex channel.
4. Initiate the call. Wait for the GA+ signal.
5. Select the dial code for meteorological reports, 41+.
6. Upon receipt of our answerback, NWS OBS MHTS, transmit the weather message starting with BBXX and the ship's call sign. The message must be ended with 5 periods. Do not send any preamble. Example:

GA+
41+
NWS OBS MHTS
BBXX WLXX 29003 99131 70808 41998 60909 10250 2021/ 4011/ 52003 71611 85264 22234 00261
20201 31100 40803.....

The 5 periods indicate the end of the message, and must be included after each report. Do not request a confirmation.

Land-Earth Station Identity (LES-ID) of U.S. Inmarsat Stations
Accepting Ships Weather (BBXX) and Oceanographic (JJYY) Reports

Operator	Service	Station ID			
		AOR-W	AOR-E	IOR	POR
TELENOR	A	01	01	01	01
TELENOR	B	01	01	01	01
TELENOR	C	001	101	304	201
TELENOR	C (Amver/SEAS)	001	101	304	201
STRATOS/IDB	A (octal ID)	13-1	13-1	13-1	13-1
STRATOS/IDB	A (decimal ID)	11-1	11-1	11-1	11-1
STRATOS/IDB	B	013	013	013	013

Use abbreviated dialing code 41. Do not request a confirmation.

If your ship’s Inmarsat terminal does not contain a provision for using abbreviated dialing code 41, telex address 0023089406 may be used via Telenor. Please note that the ship will incur telecommunication charges for any messages sent to telex address 0023089406 using any Inmarsat earth station other than Telenor.

WEATHER REPORTS THROUGH SPECIFIED U.S. COMMERCIAL RADIO STATIONS: If the U.S. Coast Guard cannot be contacted and ship is not Inmarsat equipped, as a backup, U.S. commercial radio stations specified in the publication “Observing Handbook No. 1” may be contacted to relay weather messages.

(Supersedes NTM 1(45)03) (NOAA/NWS)

(46) RADAR BEACONS (RACONs).

Radar beacons (RACONs) are radar responder devices designed to produce a distinctive image on the screens of ship's radar sets, thus enabling the mariner to determine his position with greater certainty than would be possible using a normal radar display alone.

The U.S. Coast Guard operates approximately 80 radar beacons (RACONs) as maritime navigational aids in the Great Lakes, off the Atlantic, Pacific, and Gulf coasts, and on the North Slope of Alaska. RACONs are used to mark and identify points on shore; channel separation, LNB, and other buoys; channel entrances under bridges; and uncharted hazards to navigation (the Morse letter "D", dash-dot-dot, has been reserved for this purpose). RACON marks displayed on a radar screen are Morse characters typically of length 1 to 2 miles, always start with a dash, and always extend radially outward from the radar target marked by the beacon. RACON locations and identifications are included on most marine navigation charts.

RACONs should be visible to most commercial shipboard radar systems on vessels 6-20 miles from the RACON installation, regardless of radar size. No additional receiving equipment is required. Some precautions are necessary, however, if use of RACONs is desired. Radars that operate in the 10 cm band (2900-3100 MHz) are usually installed as a second radar on larger vessels, and may not respond to RACONs. The Coast Guard now installs dual band (3 cm and 10 cm) RACONs in most locations. In addition, rain clutter control switches on radars must be switched off or, if necessary, on low to ensure that the RACON is visible. Finally, most RACONs operating in the U.S. are frequency agile RACONs. Pulse correlation circuitry (interference or clutter rejection on some radars) installed on most newer radars, if on, may prevent the radar from displaying some RACONs. This circuitry should be switched off.

(Repetition NTM 1(46)03) (USCG)

(47) NAVTEX.

NAVTEX is an international automated medium frequency (518 kHz) direct-printing service for promulgation of navigational and meteorological warnings and forecasts, as well as urgent marine safety information to ships. It was developed to provide a low-cost, simple, and automated means of receiving this information aboard ships at sea within approximately 200 nautical miles of shore. NAVTEX receivers screen incoming messages, rejecting those which had been previously received or are of a category of no interest to the user. Mariners who do not have NAVTEX receivers but have SITOR radio equipment can also receive these broadcasts by operating it in the FEC mode and tuning to 518 kHz. Internationally, NAVTEX is also broadcast on the alternate NAVTEX frequencies of 490 and 4209.5 kHz. The U.S. Coast Guard may begin an experimental broadcast from New Orleans on 4209.5 kHz.

The Coast Guard broadcasts NAVTEX messages from:

BOSTON, MA (NMF):	Identification (B_1): F Schedule (UTC): 0045, 0445, 0845, 1245, 1645, 2045
CHESAPEAKE (PORTSMOUTH), VA (NMN):	Identification (B_1): N Schedule (UTC): 0130, 0530, 0930, 1330, 1730, 2130
SAVANNAH, GA: (NMN)	Identification (B_1): E Schedule (UTC): 0040, 0440, 0840, 1240, 1640, 2040
MIAMI, FL (NMA):	Identification (B_1): A Schedule (UTC): 0000, 0400, 0800, 1200, 1600, 2000
ISABELLA (SAN JUAN), PR (NMR):	Identification (B_1): R Schedule (UTC): 0200, 0600, 1000, 1400, 1800, 2200
NEW ORLEANS, LA (NMG):	Identification (B_1): G Schedule (UTC): 0300, 0700, 1100, 1500, 1900, 2300
KODIAK, AK (NOJ):	Identification (B_1): J Schedule (UTC): 0300, 0700, 1100, 1500, 1900, 2300

(47) NAVTEX. (Continued).

KODIAK, AK (NOJ): Identification (B_1): X
Schedule (UTC): 0340, 0740, 1140, 1540, 1940, 2340

ASTORIA, OR (NMC): Identification (B_1): W
Schedule (UTC): 0130, 0530, 0930, 1330, 1730, 2130

POINT REYES (SAN FRANCISCO), CA (NMC): Identification (B_1): C
Schedule (UTC): 0000, 0400, 0800, 1200, 1600, 2000

CAMBRIA, CA (NMC): Identification (B_1): Q
Schedule (UTC): 0045, 0445, 0845, 1245, 1645, 2045

HONOLULU, HI (NMO): Identification (B_1): O
Schedule (UTC): 0040, 0440, 0840, 1240, 1640, 2040

GUAM (NRV): Identification (B_1): V
Schedule (UTC): 0100, 0500, 0900, 1300, 1700, 2100

Information broadcast over NAVTEX includes weather forecasts, offshore marine advisory warnings, search and rescue information, and navigational information that applies to waters from the line of demarcation (separating Inland Rules waters from COLREG Rules waters) to 200NM offshore. Navigational information that affects the safety of navigation of deep draft (15 feet or more) vessels within U.S. Inland Rules waters will also be included.

NAVAREA IV/XII, HYDROLANT/HYDROPAC and ice information over HF SITOR/NBDP (Simplex Telex Over Radio/ Narrow Band Direct Printing) began July 1991 from Coast Guard Stations in Boston, Point Reyes, Honolulu and Guam. Broadcasts are made on 6314 kHz, 8416.5 kHz, 12579 kHz, 16806.5 kHz and 22376 kHz. See NGA Pub. 117, Radio Navigational Aids, for schedules.

(Supersedes NTM 1(47)03) (USCG)

(48) SATELLITE DETECTION OF DISTRESS SIGNALS.

The COSPAS-SARSAT System is an international cooperative effort using satellites to detect distress beacons carried by aircraft, vessels, and persons operating in harsh remote environments. A constellation of satellites in low- earth, polar orbits detects and relays distress beacon signals to ground stations. The system delivers distress alerting and position information to the appropriate Rescue Coordination Center.

Extensive coverage is provided over the North American maritime region and other areas for 121.5/243.0 MHz; the 406 MHz system is global in its coverage.

In addition, a network of geostationary satellites is used to complement the polar orbiting constellation. Satellites in orbit over a fixed point on the equator at 22,000 miles continuously monitor the earth within their view, about 60% of the earth's surface. These satellites process 406 MHz beacon signals only. The geostationary satellites support immediate distress alerting for beacons within their field of view. The United States, India and Russia are currently operating participating satellites. Other nations plan to participate in the near future.

EMERGENCY POSITION INDICATING RADIO BEACON (EPIRB).

The Emergency Position Indicating Radio Beacon (EPIRB) is an emergency radio transmitting device used for maritime distress alerting and locating. Table 1 provides an overview of the different classes of EPIRBs currently in existence. Table 2 gives summary comparison of the significant differences between the 406 MHz and 121.5/243.0 MHz beacons. It should be noted that classes A,B,C, and S are gradually being phased out and replaced by Satellite EPIRBS of Cat I and II. For current carriage requirements refer to Navigation and Vessel Inspection Circular No. 9-95; any questions concerning requirements to carry EPIRBs or other safety equipment should be referred to the U.S. Coast Guard (G-MSE-4) Lifesaving and Fire Safety Division, telephone (202) 267-1444.

(48) SATELLITE DETECTION OF DISTRESS SIGNALS. (Continued).

TABLE 1

CLASS	FREQUENCY	DESCRIPTION	DETECTION
Cat I	406 MHz with 121.5 MHz homing signal	Float free beacon	Polar orbiting and geostationary satellites, high flying aircraft
Cat II	406 MHz with 121.5 MHz homing signal	Manually activated	Polar orbiting and geostationary satellites, high flying aircraft
A	VHF-AM 121.5 & 243.0 MHz	Float free	Polar orbiting satellites and high flying aircraft
B	VHF-AM 121.5 & 243.0 MHz	Manually activated or water-activated battery	Polar orbiting satellites and high flying aircraft
S	VHF-AM 121.5 & 243.0 MHz	Manually activated (same as Class B); required for survival craft (SOLAS)	Polar orbiting satellites and high flying aircraft
Inmarsat-E	1646 MHz	Float free beacon	Satellites

TABLE 2
SUMMARY COMPARISON OF 406 MHz AND 121.5 MHz BEACONS IN THESE CRITICAL AREAS

406 MHz EPIRB	121.5 MHz EPIRB
Coverage:	
Global.	Ground station dependent; ground stations have an effective radius of about 1800NM. Current coverage: about one-third of the world.
Reliability- False Alerts/False Alarms:	
All alerts come from beacons. Satellite beacon transmissions are digital coded signals. Satellites process only coded data, other signals are rejected.	Only about 1 in 4 alerts come from beacons. Satellites cannot discern beacon signals from many non-beacon sources. Beacons transmit anonymously.
About 1 in 10 alerts are actual distress.	Fewer than 1 in 1000 alerts are actual distress.
Individual beacon-unique coding and registration allow rapid incident corroboration. Registration became mandatory 9/13/94. About 90% of 406 MHz beacons are registered. More than 70% of 406 MHz false alarms are resolved by a phone call to registration POCs.	Since 121.5 MHz beacons transmit anonymously, the only way to ascertain the situation is to dispatch resources to investigate–a costly disadvantage.
Alerting	
First alert confidence is sufficient to warrant launch of SAR assets. Earlier launches put assets on scene earlier–Average 2 hrs saved in maritime, 6 hrs in inland. These savings are survival-significant.	High false alarm rate makes first-alert launch infeasible. Absent independent distress corroboration, RCCs must wait for additional alert information.

(48) SATELLITE DETECTION OF DISTRESS SIGNALS. (Continued).

406 MHz EPIRB	121.5 MHz EPIRB
Average initial detection/alerting by orbiting satellite is 45 minutes–worst case about 60 minutes.	Same as 406 MHz.
Average time between subsequent satellite passes is about 60 minutes.	Same as 406 MHz.
Vessel/aircraft ID, point of contact information provided with alerts allows rapid corroboration or stand-down.	Alerts are anonymous 121.5 MHz technology not capable of transmitting data.
Allows false alarm follow-up to continuously improve system integrity/reliability.	No capability.
Near instantaneous detection by geostationary satellites. (System in demonstration and evaluation phase with very substantial coverage 70N to 70S.)	No capability.
Position Information:	
2–5 km accuracy on average. Position calculated by Doppler shift analysis.	10–20 km accuracy on average. Position calculated by Doppler shift analysis.
Capable of processing beacon-transmitted position information from independent source, e.g.: GPS. Capable beacons and system infrastructure will be available/in place by end of 1997.	No capability.
Locating the Target:	
Superior alert position accuracy limits initial position uncertainty to about 40 sq. km.	Initial position uncertainty is about 700 sq. km on average.
121.5 MHz homing signal facilitates target location by radio detection finder-equipped search units.	Same as 406 MHz.

The nearest U.S. Coast Guard rescue coordination center MUST be notified whenever an inadvertent EPIRB distress alert is transmitted.

Distress beacon false alarms are a major problem. False alarms delay response, divert scarce response resources from real distress situations, and can quickly overburden the SAR system. Minimize false alarms with proper handling and storage of EPIRBs; understand and comply with manufacturer's operating instructions for your particular EPIRB and tune a radio to 121.5 or 243.0 MHz to monitor the frequency/detect any inadvertent activation. EPIRBs with two-condition, automatic-activation switches (e.g. out of bracket and in water) have demonstrated significantly reduced false alarm rates with no adverse impact on automatic distress performance. The aviation equivalent, the Emergency Locator Transmitter (ELT), has an extremely poor track record in regard to false alarms. While the EPIRB does not have the same engineering problems, the EPIRB user must be aware of how false activations can quickly overburden search and rescue resources.

Inadvertent activations should be reported immediately to the nearest RCC to protect system integrity and prevent costly false alarm response.

EPIRB owners should routinely test their beacons in accordance with manufacturer instructions, and examine them for water tightness and battery expiration date. FCC rules allow class A, B, and S EPIRBs to be turned on briefly (one second only) during the first five minutes of any hour. Signal presence can be detected by an FM radio tuned to 99.5 MHz or an AM radio tuned to any vacant frequency and located close to an EPIRB.

406 MHz beacon registration has been mandatory since 13 September 1994. Satellite emergency position-indicating radio beacon (EPIRB) is intended to save your life, and is also required by Federal Communications Commission regulations.

(48) SATELLITE DETECTION OF DISTRESS SIGNALS. (Continued).

NOAA maintains the U.S. registration data base. When a 406 MHz alert is received, the system automatically checks the data base for an ID match and appends available registration information to the alert message to the responsible RCC. Registration point of contact-provided position information can be used in conjunction with geostationary satellites immediate alerting to allow SAR response 45-90 minutes sooner than otherwise possible—a survival-significant response advantage. In circumstances where the COSPAS-SARSAT system is not able to calculate a distress position, registration data may provide the only link to rescue.

If you purchase a new or a used 406 MHz EPIRB, you MUST register it with NOAA. If you change your boat, your address or your phone number, you MUST re-register your EPIRB with NOAA.

Request 406 MHz EPIRB registration forms from, and mail or fax completed forms to:

NOAA SARSAT
E/SP3, RM 3320, FB-4
5200 Auth Road
Suitland, MD 20746-4304

or call (301) 457-5678 (fax: (301) 568-8649) for further information on registering EPIRBs. You may also register or update your beacon information online at http://www.beaconregistration.noaa.gov. NOAA sends a decal to be affixed to the beacon to confirm registration and as ready evidence of compliance. NOAA contacts all registered beacon owners on a two year schedule to maintain database accuracy. This service is free of charge. Please keep your registration current - IT MAY SAVE YOUR LIFE.

(Supersedes NTM 1(48)03) (USCG)

(49) HF AND VHF RADIOTELEPHONE AND RADIOTELEX MARINE SAFETY BROADCASTS.

Urgent and routine broadcasts of marine safety information are announced on VHF Channel 16 (156.8 MHz) and made on Channel 22A (157.1 MHz), the ship station transmit frequency portion of Channel 22, of Appendix 18 of the International Telecommunications Union (ITU) Radio Regulations.

The Coast Guard normally broadcasts selected coastal navigational warnings, local major navigational warnings, and local minor navigational warnings on VHF Channel 22A. NAVTEX broadcasts normally include only coastal navigational warnings and weather information. Medium frequency radiotelephone broadcasts can include coastal or selected coastal and local major navigational warnings. These single sideband voice broadcasts are announced on 2182 kHz and are made on 2670 kHz.

Information regarding USA VHF-FM marine safety broadcasts is published in the ITU List of Radiodetermination and Special Service Stations and other internationally-available publications.

Questions and comments concerning VHF marine safety broadcasts should be addressed to the local Coast Guard District staff, or to:

Commandant (G-SCT)
United States Coast Guard
Washington, DC 20593-0001
E-mail: CGCOMMS@COMDT.USCG.MIL

FORMAT OF MARINE INFORMATION BROADCAST/MESSAGES.

1. Urgent Marine Information Message.

a. Radiotelephone:

(1) 2182 kHz and/or Channel 16 (156.8 MHz). PAN-PAN (3 times)
HELLO ALL STATIONS THIS IS (voice call sign twice)
(brief identifying data) LISTEN (2670 kHz or Channel 22A) OUT

(2) 2670 kHz and/or Channel 22A (157.1 MHz). PAN-PAN (3 times)
HELLO ALL STATIONS THIS IS (voice call sign twice) break (text) break
THIS IS (voice call sign once) OUT

(49) HF AND VHF RADIOTELEPHONE AND RADIOTELEX MARINE SAFETY BROADCASTS. (Continued).

b. Cancellation message:

(1) Radiotelephone. PAN-PAN HELLO ALL STATIONS HELLO ALL STATIONS HELLO ALL STATIONS THIS IS (voice call sign once, date and time of message and brief identifying data on canceled urgent traffic) CANCEL PAN-PAN THIS IS (voice call sign once) OUT

2. Safety Marine Information Message Format.

Radiotelephone:

(1) 2182 kHz and/or Channel 16 (156.8 MHz) SECURITE (3 times)
HELLO ALL STATIONS THIS IS (voice call sign twice)
COAST GUARD MARINE INFORMATION BROADCAST (or)
HURRICANE ADVISORY/STORM WARNING etc. LISTEN
(2670 kHz and/or Channel 22A) OUT

(2) 2670 kHz and/or Channel 22a (157.1 MHz) SECURITE (3 times)
HELLO ALL STATIONS THIS IS (voice call sign once) break (text) break
THIS IS (voice call sign once) OUT

3. Scheduled Broadcast Format.

Radiotelephone:

(1) 2182 kHz and/or Channel 16 (156.8 MHz). HELLO ALL STATIONS
(3 times) THIS IS (voice call sign twice)
COAST GUARD MARINE INFORMATION BROADCAST LISTEN
(2670 kHz and/or Channel 22A) OUT

(2) 2670 kHz and/or Channel 22A (157.1 MHz) HELLO ALL STATIONS
(3 times) THIS IS (voice call sign once) break (text) break THIS IS
(voice call sign once) OUT

a. No preliminary announcement is made for HF broadcasts.

b. When no information is to be transmitted during a scheduled broadcast, the station shall make the following transmission after the call: “NO MARINE INFO BCST THIS SCHEDULE”

4. Abbreviations.

a. In order to reduce the circuit time of Marine Information Broadcasts, readily recognizable abbreviations shall be used by the originator where there is no chance of ambiguity.

b. When broadcasting National Weather Service (NWS) information the exact text as received from the NWS shall be transmitted.

(Repetition NTM 1(49)03) (USCG)

(50) MARAD ADVISORIES.

MARAD Advisories rapidly disseminate information on government policy, danger and safety issues pertaining to vessel operations, and other timely maritime matters. MARAD Advisories are periodically issued by the U.S. Maritime Administration (MARAD) to vessel masters, operators and other U.S. maritime interests. The texts of MARAD Advisories are published in weekly Notice to Mariners No. 1, and can be accessed through the National Geospatial-Intelligence Agency’s Maritime Safety Information website (http://pollux.nss.nga.mil) and through the MARAD website (http://marad.dot.gov).

MARAD ADVISORIES (In force 17 December 2003)

MARAD ADVISORY NO. 00-07 (221500Z NOV 00)
SUBJECT: YEMEN
TO: ALL OPERATORS OF U.S. FLAG AND EFFECTIVE U.S. CONTROL VESSELS

1. The National Geospatial-Intelligence Agency (NGA) requested that the Maritime Administration (MARAD) issue HYDROPAC 1694/00(62) as a MARAD Advisory to ensure wider dissemination to the maritime community. Below is

(50) MARAD ADVISORIES. (Continued).

HYDROPAC 1694/00(62) in its entirety.

2. Due to recent events in Yemen, mariners are advised to use increased caution when approaching or entering Yemeni waters. Special Warning 113 is still in effect. See U.S. Notice to Mariners 45/2000 date November 4, 2000 or the NGA Marine Navigation website at http://pollux.nss.nga.mil.

MARAD ADVISORY NO. 01-01 (131530Z MAR 01)
SUBJECT: MINE DANGER AREA ADVISORY FOR MERCHANT SHIPPING IN THE NORTHERN PERSIAN (ARABIAN) GULF
TO: ALL OPERATORS OF U.S. FLAG, EFFECTIVE U.S. CONTROLLED VESSELS AND OTHER MARITIME INTERESTS

1. The Commander, U.S. Navy Central Command (COMUSNAVCENT), has issued the following Merchant Ship Advisory. This cancels MARAD Advisory 98-1 and provides the results of Mine Danger Area (MDA) clearance off the coast of Kuwait.
2. COMUSNAVCENT Mine Countermeasure ships conducted extensive mine hunting operations in the Arabian Gulf in an attempt to certify known mined areas to be mine free. To date, thorough searches of MDA numbers SEVEN, EIGHT, and NINE as defined in MARAD Advisory 92-2 have been completed with no mines or ambiguous contacts found.
3. The following MDA was specified as an area where mines were known to exist, and although partially searched for mines, remains the area with the highest probability of mines and should be avoided by all shipping:

MDA Number TEN
29-51.50N 048-46.30E
29-51.50N 048-48.00E
29-40.30N 048-48.00E
29-37.25N 048-39.60E
29-37.25N 048 32.50E

4. COMUSNAVCENT has determined that appropriate clearance of MDA number SIX has been achieved with the exception of the shallowest portion as follows:

28-32.23N 048-26.60E
28-32.14N 048-32.50E
28-37.00N 048-27.50E
28-37.75N 048-24.25E

5. The remainder of MDA number SIX and MDAs numbers SEVEN, EIGHT AND NINE have been rescinded. NOTE: Because areas previously mined can never be judged completely safe, even after successful demining operations, mariners are cautioned that mines still present a hazard. Vessels needing to anchor within the former MDAs should do so at the direction of local authorities.
6. This cancellation of previous MDAs, transit channel coordinates and mine swept areas does not guarantee the safe passage or the absence of mines, nor does it represent any assumption of liability by the U.S. Government for the safety of commercial traffic. All merchant vessels are free to choose their own navigational tracks and are not restricted by this Advisory or the U.S. Government in the choice.
7. For updates on this Advisory merchant vessels can contact the COMUSNAVCENT Maritime Liaison Office (MARLO) Bahrain via telex 7031 (ASU BN), landline (973) 743-925, or fax (973) 743-930. Vessels should also consult the latest editions of NGA nautical charts as updated with chart corrections found in the Summary of Corrections, Volume 3 and at the Maritime Safety Information Center homepage at pollux.nss.nga.mil. Corrections specific to the MDAs were published in Notice to Mariners 20/1998 and 45/1999.
8. Note that the positions listed in this Advisory are given using the World Geodetic System (WGS).
9. Vessel operators are requested to forward this Advisory to their vessels in or entering the affected area as soon as possible and to all other vessels by the most effective means.
10. For further information regarding the issuance of this or other MARAD Advisories, contact the Maritime Administration, Office of Ship Operations, Division of Operations Support, Code MAR-613, Room 2123, 400 Seventh Street SW, Washington DC 20590; telephone (202) 366-5735, fax (202) 366-3954.

(50) MARAD ADVISORIES. (Continued).

MARAD ADVISORY NO. 01-07 (051700Z NOV 01)
SUBJ: MARITIME INDUSTRY REPORTING OF SUSPECTED/ACTUAL TERRORIST INCIDENTS
TO: OPERATORS OF U.S. FLAG AND EFFECTIVE U.S. CONTROLLED VESSELS AND OTHER MARITIME INTERESTS
The following U.S. Coast Guard message was originally sent to all Coast Guard units on 31 Oct. It is being released as a MARAD Advisory in order to ensure the widest distribution possible.

1. "Purpose: This message is to provide the maritime industry with one national telephone number (800-424-8802) to report suspected and actual terrorist incidents.
2. Background: The National Response Center (NRC) is the central point of contact for all oil, chemical, radiological, biological and etiological releases anywhere in the United states. These hazardous substances may potentially be used in a terrorist incident, and given the existing capabilities, the NRC can serve as an effective clearinghouse for notification of terrorism incidents.
3. Discussion: (A) While it may be difficult to predict and prevent a terrorist attack, certain steps can be implemented to minimize the chance that the attack will disrupt vessel/port operations. CG Headquarters is working with industry, field units, and other law enforcement agencies to develop and communicate best practices for prevention. The FBI and USPS have published guidance on their websites that provide "tell-tale" signs for identifying suspicious packages. Further, some cruise ship companies have set up satellite mail processing trailers to minimize the impact of an anthrax threat on both the vessel and terminal operations. (B) Upon notification of a potential terrorist incident the NRC will connect the caller to the FBI's Strategic Intelligence and Operations Center (SIOC), who will coordinate with other agencies to perform an immediate assessment of the threat credibility. In some instances, the FBI may be able to verify that the report is a false alarm or hoax and requires no response. Other cases may require an on scene assessment by the FBI and other federal, state and local officials. In conjunction with the threat assessment, the NRC will also notify other NRT response agencies under existing protocols.
4. Action: (A) In addition to oil and hazardous substance releases, the NRC should be notified of any suspected terrorist incident, particularly those affecting transportations systems. Units should ensure all reports of suspected or actual incidents are reported to the NRC at 800-424-8802 or 202-267-2675. (B) Recommend that the contents of this ALCOAST be widely distributed to the maritime industry so they know how to report suspected/actual terrorist incidents.
5. Internet release authorized.
6. Released by RADM Pluta, Assistant Commandant for Marine Safety and Environmental Protection, and RADM Cross, Assistant Commandant for Operations."
7. All U.S.-flag operators are requested to forward this advisory to their ships by the most expedient means. This advisory will subsequently be published in the weekly "Notice to Mariners" and MARAD worldwide website.
8. For further information regarding this Advisory, contact the Maritime Administration, Office of Ship Operations, Code MAR-613, Room 2123, 400 Seventh Street SW, Washington DC 20590; telephone 202-366-5735; or fax 202-366-3954.

MARAD ADVISORY NO. 02-02 (131730Z JUN 02)
SUBJECT: VESSEL REPORTING TO NATO SHIPPING CENTER FOR MERCHANT SHIPS TRANSITING THE SUEZ CANAL, UPDATE
TO: OPERATORS OF U.S. FLAG VESSELS AND AND OTHER MARITIME INTERESTS

1. The NATO Shipping Center in Northwood, UK continues to support NATO Naval forces deployed in the Eastern Mediterranean. These forces have established a deterrent naval presence and are conducting surveillance and monitoring operations which has been extended until 01 Jan 03. It is intended that the Shipping Center provide shipping information to the warships while also acting as a point of contact for the merchant marine.
2. The strategic significance of the Suez Canal during a period of tension in the Middle East, together with the campaign against terrorists are the prime reasons for the naval deployment. The surveillance operation and activation of the Center have been discussed with Lloyds of London who have indicated that a deterrent naval presence would have a beneficial stabilizing influence on insurance premiums in the region.
3. In order for the Shipping Center to be effective the cooperation of the merchant marine of NATO and Partner Countries is required. Specifically, details are requested of ships intending to transit the Suez Canal, or which have completed the North bound transit, between Longitude 28˚ East and Port Said, EG (Longitude 28˚ East passes through the Isle of Rhodes, GR).
4. In order to give adequate time for the data to be compiled and sent to the NATO warships, the information is required 24 hours in advance. Provision of this information will assist in the compilation of an accurate shipping plot for the surveillance and monitoring of shipping by NATO naval forces in the region. It will also reduce VHF traffic between merchant and naval vessels.

50) MARAD ADVISORIES. (Continued).

5. The preferred method for merchant vessels to report to the Shipping Center is by e-mail. Alternate means are by fax or telephone.
   E-mail: shippingcentre@eastlant.nato.int
   Website: http://www.eastlant.nato.int/natosc/index.htm
   Fax: +44 1923 843575
   Phone: +44 1923 843574
6. In order to further encourage reporting to the Shipping Center, the data requested has been significantly reduced as detailed below. While the reporting of shipping data is on a voluntary basis, Nations are strongly encouraged to support this NATO operation which, by providing a stabilizing naval presence, brings benefits to shipping in the region.

   Ship Data:
   1. Ship's Name
   2. International Call Sign
   3. IMO Number
   4. General Nature of Cargo

   Voyage Data:
   5. Southbound Ships
      (a) ETD and Name of Last Port of Call
      (b) ETA Suez
   6. Northbound Ships
      (a) ETD Suez
      (b) Next Port
7. For further information regarding this Advisory, contact the Maritime Administration, Office of Ship Operations, Division of Operations Support, Code MAR-613 Room 2122, 400 Seventh Street SW, Washington, DC 20590; Telephone (202) 366-5735, Fax (202) 366-3954.
8. This Advisory cancels MARAD Advisory 01-08 (21 Dec 01).

MARAD ADVISORY NO. 02-05 (262118Z JUL 02)
SUBJECT: MARITIME ALERT AND THREAT DISSEMINATION
TO: OPERATORS OF U.S. FLAG AND EFFECTIVE U.S. CONTROLLED VESSELS AND OTHER MARITIME INTERESTS

1. The Maritime Administration has received information from the Department of Transportation's Office of Intelligence and Security, regarding increased threat possibilities to American ships operating in or near the waters of Sudan, Yemen, Somalia, Indonesia, and the Strait of Malacca. While there is no known specific threat information, ships are urged to review their security procedures and discuss with local Port Authorities what security measures are in place to protect ships at anchor or pierside from surface threats, threats from land, or underwater threats.
2. U.S. merchant vessels and cruise ships should be on a heightened state of security, should closely monitor the National Geospatial-Intelligence Agency's (NGA) broadcast warnings and should review the emergency communication procedures for assistance in NGA Publication 117.
3. All U.S.-flag ships required by regulation to file Amver position reports and operating in the north Arabian Sea, Gulf of Oman, Persian Gulf, Gulf of Aden, Red Sea and the Suez Canal are reminded to file Amver position reports every 24 hours vice every 48 hours.
4. All U.S.-flag operators with ships in the affected areas are requested to forward this Advisory to their ships by the most expedient means. This Advisory will subsequently be published in the weekly "Notice to Mariners" and MARAD worldwide website.
5. All U.S.-flag operators are advised that they can contact the Maritime Administration for information and assistance regarding vessel operations especially if they have security concerns. For further information regarding this Advisory contact the Maritime Administration, Office of Ship Operations, Code MAR-613, Room 2123, 400 7th Street SW, Washington, DC 20590; Telephone 202-366-5735, or by email to opcentr1@marad.dot.gov.

MARAD ADVISORY NO. 02-07 (102300Z OCT 02)
SUBJECT: THREAT ADVISORY
TO: OPERATORS OF U.S. FLAG AND EFFECTIVE U.S. CONTROLLED VESSELS AND OTHER MARITIME INTERESTS

(50) MARAD ADVISORIES. (Continued).

1. This provides the latest Advisory from U.S. law enforcement and intelligence agencies addressing the current threat and is provided by the Department of Transportation Office of Intelligence and Security. This Advisory is based upon publicly released information and may be shared within the transportation community.
2. Recent statements, apparently by Al Qaeda leaders, threaten attacks against US economic interests. An audio message from Osama Bin Laden (taped on an undetermined date), broadcast by Al Jazeera on Sunday (6 October), refers to Al Qaeda targeting key sectors of the US economy. Another senior leader (Bin Laden's senior deputy, Ayman Al Zawahir) reiterated the threat in the closing line of an audio taped interview released Tuesday (9 October). This information strengthens previous assessments that Al Qaeda continues to plan major attacks against U.S. interests. The focus upon economic targets is consistent with Al-Qaeda's stated ideological goals and longstanding strategy, to undermine what they see as the backbone of US power, the economy. Striking a prominent U.S. target for economic and symbolic reasons would have immediate worldwide impact.
3. The coordinated release of these statements, coupled with our knowledge of ongoing plotting by Al Qaeda members and threat information described by detainees, strengthens previous assessments that Al Qaeda continues to plan major attacks against US interests. The statements suggest that an attack may have been approved, while the specific timing is left to operatives in the field. Our concerns are heightened by comments from Al Qaeda detainees who are independently interpreting these taped remarks as a sign of attack. In 1998, Al Qaeda issued a fatwa (religious ruling) calling for attacks against Americans worldwide, apparently presaging the August 7, 1998 East Africa Embassy bombings. The content of the statements and the context surrounding these threats reinforces our view that they may signal an attack. One senior detainee maintains that Al Qaeda would only release such a statement after approving a specific plan for an attack. At this time, we have no information on a specific time, date or location of an attack.
4. Other aspects of the statements reflect what we know of Bin Laden and Al Qaeda strategy. In addition, other recent appeals in extremist circles, some purporting to be from Bin Laden, urge Muslim youth to strike US forces in Kuwait, Jordan, Qatar, and Bahrain. The Al Qaeda organization, which has lost its safe haven in Afghanistan and many of its leaders, is attempting to manipulate the broader Islamic extremist community to attack the United States at home and abroad.
5. The focus on economic targets is consistent with Al Qaeda's stated ideological goals and longstanding strategy. The September 11 attacks and commentary on these attacks by Bin Laden and others indicate how central economic targets are to this strategy: the group's leaders have said that they aim to undermine what they see as the backbone of US power, the economy. Our adversary is trying to portray American influence as based on economic might and therefore seeks to strike an economic target prominent enough for economic and symbolic reasons that it would have immediate resonance around the world.
6. Recipients should review and implement additional prudent steps to detect, disrupt, deter, and defend against potential attacks against our nation's critical transportation infrastructure and installations at home and abroad.
7. Due to the lack of specificity of method, target, and timing, the Homeland Security Advisory System threat level will remain at yellow-elevated, at this time.
8. U.S. DOT reminds the transportation industry to report information concerning suspicious activity to their local FBI office through the FBI website at http://www.fbi.gov/contact/fo/fo.htm or to the National Infrastructure Protection Center (NIPC) at its website at http://www.nipc.gov/incident/cirr.htm. The maritime industry should contact the National Response Center (NRC) to report suspected and actual terrorist incidents at 800-424-8802 or 202-267-2675.
9. U.S. merchant vessels and cruise ships should be on a heightened state of security, should closely monitor the National Geospatial-Intelligence Agency's (NGA) broadcast warnings and should review the emergency communication procedures for assistance in NGA Publication 117.
10. All U.S.-flag ships required by regulation to file Amver position reports and operating in the north Arabian Sea, Gulf of Oman, Persian Gulf, Gulf of Aden, Red Sea and the Suez Canal are reminded to file Amver position reports every 24 hours vice every 48 hours.
11. All U.S.-flag operators are required to forward this Advisory to their ships by the most expedient means. This Advisory will subsequently be published in the weekly "Notice to Mariners" and MARAD internet website at http://www.marad.dot.gov/headlines/.
12. This Advisory cancels and replaces MARAD Advisory 01-06.
13. All U.S.-flag operators are advised that they can contact the Maritime Administration for information and assistance regarding vessel operations especially if they have security concerns. For further information regarding this Advisory contact the Maritime Administration, Office of Ship Operations, Code MAR-613, Room 2123, 400 7th Street SW, Washington, DC 20590; Telephone 202-366-5735, or by email to opcentr1@marad.dot.gov.

(50) MARAD ADVISORIES. (Continued).

MARAD ADVISORY NO. 03-04 (202100Z MAR 03)
SUBJECT: NGA PUB. 117, RADIO NAVIGATIONAL AIDS, INSTRUCTIONS FOR THE PREVENTION AND REPORTING OF HOSTILE INCIDENTS DIRECTED AT MERCHANT SHIPS
TO: OPERATORS OF U.S. FLAG AND EFFECTIVE U.S. CONTROLLED VESSELS AND OTHER MARITIME INTERESTS

1. Hostile actions directed at merchant shipping are a present and growing problem. These hostile actions include piracy, theft and terrorism.
2. Several agencies, nationally and internationally, assist in countering this problem. The first step in controlling the problem is to establish a reliable database of incidents to define the area and degree of the problem. Such a database has been instituted by the National Geospatial-Intelligence Agency (NGA) as the Anti-Shipping Activity Message (ASAM) file. This file can be accessed via the internet at NGA's Maritime Safety Information website at http://pollux.nss.nga.mil.
3. NGA has also established Ship Hostile Action Report (SHAR) procedures to disseminate information within the U.S. Government on hostile actions against U.S. merchant ships. The procedures for sending SHAR reports are detailed in NGA Pub. 117, "Radio Navigational Aids," Edition 2002, on page 4-15.
4. It should be noted that neither the ASAM nor SHAR reports are a distress message. U.S. and effective U.S. controlled (EUSC) vessels under attack or threat of attack may request direct assistance from the U.S. Navy by following the procedures in Part II of Chapter 4 of Pub. 117, Edition 2002.
5. The Maritime Administration urges all vessels to carry NGA Pub. 117, "Radio Navigational Aids," Edition 2002. An incentive for all ship operators to have the new edition of Pub. 117 on board their vessels is the IMO concurrence that Pub. 117 should be accepted for carriage to meet the requirements of SOLAS regulation V/20 in lieu of the "GMDSS Master Plan." (The full text of this announcement is printed in "Notice to Mariners" 50/02, dated 14 December 2002.) NGA Pub. 117 can be accessed via the internet at NGA's Maritime Safety Information website at http://pollux.nss.nga.mil.
6. All NGA navigational publications offered for sale may be ordered online, by phone or fax, or by mail. Orders can be placed on the encryption-protected U.S. Government online bookstore (http://bookstore.gpo.gov), by phone (202-512-1800, 1-866-512-1800, toll free from 7:30 AM until 9:00 PM Eastern, Monday through Friday), fax (202-512-2250, 24 hours a day), or by regular mail. Send mail orders and payment to:
   Superintendent of Documents
   P.O. Box 371954
   Pittsburgh, PA 15250-7954
7. Cancel MARAD Advisory 01-05.
8. Vessel operators are requested to forward this Advisory to their vessels, terminal and security officials as appropriate. This Advisory will subsequently be published in NGA's weekly "Notice to Mariners" and MARAD's internet website at http://www.marad.dot.gov.
9. For further information regarding this Advisory contact the Maritime Administration, Office of Ship Operations, Code MAR-613, Room 2123, 400 7th Street SW, Washington, DC 20590; telephone 202-366-5735, or by email to opcentr1@marad.dot.gov.

(Supersedes NTM 1(50)03) (U.S. MARITIME ADMINISTRATION)

(51) NAVIGATION RULES, INTERNATIONAL-INLAND.

The latest edition of the Navigation Rules was published in July 1999. This book contains the International Regulations for Preventing Collisions at Sea, commonly called the 72 COLREGS, and the Inland Navigation Rules which supersede the old Inland Rules, Western Rivers Rules, Great Lakes Rules, and other Pilot rules. The book also includes sections on COLREGS demarcation lines, penalty provisions, alternative compliance, and the Vessel Bridge-to-Bridge Radiotelephone Regulations.
PENALTIES: All vessel operators, whether recreational or commercial, are required to understand and follow these Navigation Rules. Violation of the Navigation Rules or negligent operation of a vessel may result in civil penalties up to $5000.
CARRIAGE REQUIREMENT: The operator of each self-propelled vessel 12 meters or more in length is required to carry on board and maintain for ready reference a copy of the Inland Navigation Rules (contained in this publication).
HOW TO ORDER: The Navigation Rules: International-Inland is available from the Government Printing Office for $14.50. To order by telephone using VISA, MasterCard or Discover Card call (202) 512–1800, ask for the book by name and give GPO stock number 050–012–00407–2, or mail check or money order payable to Superintendent of Documents, to Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. COMDTINST M16672.2D (Navigation Rules, International - Inland) is available online at http://www.navcen.uscg.gov/mwv/navrules/download.htm.

(51) NAVIGATION RULES, INTERNATIONAL-INLAND. (Continued).

CHANGES: Changes are published, as they occur, in the Notice to Mariners and appear in Summary of Corrections (Volume 5). For questions concerning the Navigation Rules please write to:

Commandant (G-MWV)
U.S. Coast Guard
2100 2nd Street S.W.
Washington, D.C. 20593–0001
Telephone: (202) 267–0574.

You may also submit your questions to the USCG website http://www.navcen.gov/mwv/navrules/navrules.htm.
(Supersedes NTM 1(51)03) (USCG)

(52) IMPROPER USE OF STROBE LIGHTS, SEARCHLIGHTS AND DANGEROUS CARGO LIGHT.

STROBE LIGHTS: The Coast Guard has received reports of the use of white strobe lights as "anticollision" lights and as fishing net markers. A white strobe light is a distress signal in Inland Waters and prohibited under International Rules (except for use as a distress signal on life jackets). Misuse of these lights may result in civil penalties up to $5000.

SEARCHLIGHTS: Fishing vessels using searchlights while setting and recovering gear, and other vessels using searchlights, are reminded that improper use of searchlights violates both Inland and International Navigation Rules. Examples of violations include: (a) leaving searchlights lit constantly while underway, so as to interfere with visibility of navigation lights and (b) shining at other vessels so as to embarrass them and impair the night vision of other mariners.

DANGEROUS CARGO LIGHT: Warning: foreign vessels operating in the Far East, specifically in the Straits of Malacca, commonly use an all around red light to indicate carriage of a dangerous cargo. In addition, these vessels often use deck security lighting underway to deter piracy; this may obscure the vessel's running lights. U.S. vessels transiting these areas should be aware of these practices and plan accordingly.

NOTE: This notice does not prohibit vessels from using additional lights so long as they cannot be confused with or obscure navigation lights. Mariners are cautioned that all types of high intensity lights, when used at sea, must be properly directed or adequately screened so as to not embarrass another vessel or be misinterpreted. When these lights are not being used for a specific task they should be extinguished.
(Repetition NTM 1(52)03) (USCG)

(53) GUIDELINES FOR WGS DATUM CONVERSION.

1. The following information is provided to assist navigators in converting geographic positions from World Geodetic System 1972 (WGS 72) to World Geodetic System 1984 (WGS 84) and vice versa:

   a. Positions obtained from satellite navigation systems or measured from charts referred to the World Geodetic System 1972 must be moved 0.01 minute eastward and 0.00 minute northward to be placed on the World Geodetic System 1984.

   b. Positions obtained from satellite navigation systems (or charts) referred to the World Geodetic System 1984 must be moved 0.01 minutes westward and 0.00 minutes southward to be placed on the World Geodetic System 1972.

2. Individuals who need somewhat more precise values may use the following tables to minimize the error due to the truncation of transformed coordinates.
3. Users with a need for the most accurate transformation from WGS 72 to WGS 84 may use the following transformation equations:

Latitude Shift = (4.5 cos Ø/ a sin 1") + (f sin 2 Ø/sin 1")
= 0.1455 cos Ø + 0.0064 sin 2 Ø seconds northward
Longitude Shift = 0.554 seconds eastward
Where: Ø= latitude
f = difference in flattening of the ellipsoids = 0.3121057×10^{7}
a = semi-major axis of WGS 72 ellipsoid = 6,378,135 meters.

(53) GUIDELINES FOR WGS DATUM CONVERSION. (Continued.

The datum shift from WGS 84 to WGS 72 is computed using the same equation but the direction of the computed shift is reversed–e.g. the latitude shift is southward and the longitude shift is westward.

4. Since the maximum shift only amounts to approximately 17 meters in longitude and 4 meters in latitude on the ground, the shift need not be used to plot positions on charts at scales smaller than 1:50,000.

POSITIONS REFERRED TO WORLD GEODETIC SYSTEM 1972 MUST BE MOVED AS INDICATED TO BE IN AGREEMENT WITH WORLD GEODETIC SYSTEM 1984

90N	0.0000	MINUTES NORTH AND	0.0092	MINUTES EAST
85N	0.0002	MINUTES NORTH AND	0.0092	MINUTES EAST
80N	0.0005	MINUTES NORTH AND	0.0092	MINUTES EAST
75N	0.0007	MINUTES NORTH AND	0.0092	MINUTES EAST
70N	0.0009	MINUTES NORTH AND	0.0092	MINUTES EAST
65N	0.0011	MINUTES NORTH AND	0.0092	MINUTES EAST
60N	0.0013	MINUTES NORTH AND	0.0092	MINUTES EAST
55N	0.0015	MINUTES NORTH AND	0.0092	MINUTES EAST
50N	0.0017	MINUTES NORTH AND	0.0092	MINUTES EAST
45N	0.0018	MINUTES NORTH AND	0.0092	MINUTES EAST
40N	0.0020	MINUTES NORTH AND	0.0092	MINUTES EAST
35N	0.0021	MINUTES NORTH AND	0.0092	MINUTES EAST
30N	0.0022	MINUTES NORTH AND	0.0092	MINUTES EAST
25N	0.0023	MINUTES NORTH AND	0.0092	MINUTES EAST
20N	0.0024	MINUTES NORTH AND	0.0092	MINUTES EAST
15N	0.0024	MINUTES NORTH AND	0.0092	MINUTES EAST
10N	0.0024	MINUTES NORTH AND	0.0092	MINUTES EAST
5N	0.0024	MINUTES NORTH AND	0.0092	MINUTES EAST
0N	0.0024	MINUTES NORTH AND	0.0092	MINUTES EAST
5S	0.0024	MINUTES NORTH AND	0.0092	MINUTES EAST
10S	0.0024	MINUTES NORTH AND	0.0092	MINUTES EAST
15S	0.0023	MINUTES NORTH AND	0.0092	MINUTES EAST
20S	0.0022	MINUTES NORTH AND	0.0092	MINUTES EAST
25S	0.0021	MINUTES NORTH AND	0.0092	MINUTES EAST
30S	0.0020	MINUTES NORTH AND	0.0092	MINUTES EAST
35S	0.0019	MINUTES NORTH AND	0.0092	MINUTES EAST
40S	0.0018	MINUTES NORTH AND	0.0092	MINUTES EAST
45S	0.0016	MINUTES NORTH AND	0.0092	MINUTES EAST
50S	0.0015	MINUTES NORTH AND	0.0092	MINUTES EAST
55S	0.0013	MINUTES NORTH AND	0.0092	MINUTES EAST
60S	0.0011	MINUTES NORTH AND	0.0092	MINUTES EAST
65S	0.0009	MINUTES NORTH AND	0.0092	MINUTES EAST
70S	0.0008	MINUTES NORTH AND	0.0092	MINUTES EAST
75S	0.0006	MINUTES NORTH AND	0.0092	MINUTES EAST
80S	0.0004	MINUTES NORTH AND	0.0092	MINUTES EAST
90S	0.0000	MINUTES NORTH AND	0.0092	MINUTES EAST

POSITIONS REFERRED TO WORLD GEODETIC SYSTEM 1984 MUST BE MOVED AS INDICATED TO BE IN AGREEMENT WITH WORLD GEODETIC SYSTEM 1972

90N	0.0000	MINUTES SOUTH AND	0.0092	MINUTES WEST
85N	0.0002	MINUTES SOUTH AND	0.0092	MINUTES WEST
80N	0.0005	MINUTES SOUTH AND	0.0092	MINUTES WEST
75N	0.0007	MINUTES SOUTH AND	0.0092	MINUTES WEST
70N	0.0009	MINUTES SOUTH AND	0.0092	MINUTES WEST
65N	0.0011	MINUTES SOUTH AND	0.0092	MINUTES WEST

(53) GUIDELINES FOR WGS DATUM CONVERSION. (Continued.

60N	0.0013	MINUTES SOUTH AND	0.0092	MINUTES WEST
55N	0.0015	MINUTES SOUTH AND	0.0092	MINUTES WEST
50N	0.0017	MINUTES SOUTH AND	0.0092	MINUTES WEST
45N	0.0018	MINUTES SOUTH AND	0.0092	MINUTES WEST
40N	0.0020	MINUTES SOUTH AND	0.0092	MINUTES WEST
35N	0.0021	MINUTES SOUTH AND	0.0092	MINUTES WEST
30N	0.0022	MINUTES SOUTH AND	0.0092	MINUTES WEST
25N	0.0023	MINUTES SOUTH AND	0.0092	MINUTES WEST
20N	0.0024	MINUTES SOUTH AND	0.0092	MINUTES WEST
15N	0.0024	MINUTES SOUTH AND	0.0092	MINUTES WEST
10N	0.0024	MINUTES SOUTH AND	0.0092	MINUTES WEST
5N	0.0024	MINUTES SOUTH AND	0.0092	MINUTES WEST
0N	0.0024	MINUTES SOUTH AND	0.0092	MINUTES WEST
5S	0.0024	MINUTES SOUTH AND	0.0092	MINUTES WEST
10S	0.0024	MINUTES SOUTH AND	0.0092	MINUTES WEST
15S	0.0023	MINUTES SOUTH AND	0.0092	MINUTES WEST
20S	0.0022	MINUTES SOUTH AND	0.0092	MINUTES WEST
25S	0.0021	MINUTES SOUTH AND	0.0092	MINUTES WEST
30S	0.0020	MINUTES SOUTH AND	0.0092	MINUTES WEST
35S	0.0019	MINUTES SOUTH AND	0.0092	MINUTES WEST
40S	0.0018	MINUTES SOUTH AND	0.0092	MINUTES WEST
45S	0.0016	MINUTES SOUTH AND	0.0092	MINUTES WEST
50S	0.0015	MINUTES SOUTH AND	0.0092	MINUTES WEST
55S	0.0013	MINUTES SOUTH AND	0.0092	MINUTES WEST
60S	0.0011	MINUTES SOUTH AND	0.0092	MINUTES WEST
65S	0.0009	MINUTES SOUTH AND	0.0092	MINUTES WEST
70S	0.0008	MINUTES SOUTH AND	0.0092	MINUTES WEST
75S	0.0006	MINUTES SOUTH AND	0.0092	MINUTES WEST
80S	0.0004	MINUTES SOUTH AND	0.0092	MINUTES WEST
90S	0.0000	MINUTES SOUTH AND	0.0092	MINUTES WEST

(Repetition NTM 1(53)03) (NGA)

(54) ANTI-SHIPPING ACTIVITIES MESSAGE.

The Anti-Shipping Activities Message (ASAM) database, a part of the Maritime Safety Information Division website is a National Geospatial-Intelligence Agency service for mariners providing reports of hostile actions directed against ships. The ASAM database was developed at the request of the U.S. Interagency Working Group on Piracy and Maritime Terrorism. It contains random reports of various forms of aggression against shipping around the world. Events are categorized by date and by geographic area and are based on the NGA subregion system. The user can submit an ASAM, with the full particulars of an incident to be reported, or search the existing ASAM database by user-defined queries via the Maritime Safety Information Division website (http://pollux.nss.nga.mil). Upon receipt of the ASAM at NGA, the text is reviewed and evaluated for further action, edited, and stored in the ASAM database for access by all customers. The database can be used as a voyage planning tool by providing cautionary information to ship owners and masters concerning security conditions in and near ports and narrow channels around the world. Examples of ASAM Reports in this file include the ACHILLE LAURO incident, robberies of ships transiting the Malacca Straits, attacks on fishing boats and merchants ships coasting off Western Sahara, and certain events occurring in and around the Persian Gulf. When sending a hostile action report the user of ASAM should provide NGA with as much of the following information as is possible:

1. Date of Occurrence;
2. Geographic Location;
3. Known or Suspected Aggressor;
4. Victim (Ship’s) Name;
5. A detailed description of the occurrence being reported.

(54) ANTI-SHIPPING ACTIVITIES MESSAGE. (Continued).

For further information on the ASAM database users may contact (301) 227-3173 or write:

MARITIME SAFETY INFORMATION DIVISION (PTNM)
ST D 44
NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY
4600 SANGAMORE ROAD
BETHESDA, MD 20816-5003

Recent reports have stated there are 700 identifiable terrorist groups who have committed more than 8000 major acts of political violence since 1962. In one recent year there were 450 such actions against ships around the globe. Subregions that cover the crossroads of the world are more active with anti-shipping activities than some remote areas. Note that the ASAM file is only an indicator of hostile actions reported to NGA and is not a complete listing of all hostile actions that have occurred worldwide. NGA strongly urges the mariner to assist in the population of the ASAM database by sending reports of hostile actions.
(Repetition NTM 1(54)03) (NGA/PTNM)

(55) CAUTION ON ANNOUNCEMENT OF NEW CHARTS AND PUBLICATIONS.

CAUTION: DO NOT USE A NEW CHART OR PUBLICATION UNTIL IT IS ANNOUNCED IN NOTICE TO MARINERS. There may be occasions when a new edition of a chart or publication is received prior to the official announcement of its release being published in Notice to Mariners. Since Notice to Mariners corrections are for specific editions of products, it is imperative that the user neither discard the previous edition nor use the new edition until this official announcement is received. Further, since Notice to Mariners corrections are for specific editions of products, it is critical that the user update only the specifically-referenced product edition. Additionally, users of the NGA website are advised that announcements of new editions in this system appear approximately two weeks ahead of the printed Notice to Mariners.
(Repetition NTM 1(55)03) (NGA/PTNM)

(56) GLOBAL POSITIONING SYSTEM (GPS) AND DIFFERENTIAL GPS (DGPS) INFORMATION.

The Global Positioning System (GPS) is a satellite-based radionavigation system with continuous worldwide coverage. It provides navigation, position, and timing information to air, marine, and land based users. GPS is operated and controlled by the Department of Defense (DoD) under Air Force management. Although originally intended for military use only, federal radionavigation policy has established that the GPS Standard Positioning Service (SPS) will be available for civil use.

GPS Initial Operational Capability (IOC) was established on December 8, 1993. At IOC, the GPS achieved its operational configuration for providing SPS. Full Operational Capability (FOC) to meet operational military functionality was achieved July 17, 1995. Computer programs are available from commercial sources so that interested users can determine the availability and quality of GPS coverage at their particular location.

The U.S. Coast Guard is the Government interface for civil users of GPS. The Coast Guard established the Navigation Information Service (NIS), as a part of the Coast Guard Navigation Center (NAVCEN) located in Alexandria, Virginia, to meet the needs of the civil user. The information provided includes planned, current or recent satellite outages, constellation changes, user instructions and tutorials, system status, information about Coast Guard provided radionavigation systems, and information about federal radionavigation policy and systems.

Whenever possible, advance notice of GPS satellite outages will be provided by the DoD and made available by the U.S. Coast Guard. The DoD must provide at least 48-hour advance notice for any planned disruption of the Standard Positioning Service (SPS) in peacetime. The NIS advisory services are updated whenever new information is received.

NIS services are described below:

1. Watchstanders are available 24 hours to answer phones (703) 313-5900, email nisws@navcen.uscg.mil and fax (703) 313 5920. The NIS 24 hour voice recording provides access to a 90-second message of the current system status. Forecasted outages, historical outages, and other changes in the GPS are included as time permits. The NIS 24-hour voice recording phone number is (703) 313-5907.

(56) GLOBAL POSITIONING SYSTEM (GPS) AND DIFFERENTIAL GPS (DGPS) INFORMATION. (Continued).

2. The Department of Commerce transmits recorded time information on WWV/WWVH 2.5, 5, 10, 15, and 20 MHz frequencies. During the 40–second interval between time ticks, navigation information is announced by voice. Listen at minute 14 and 15 on WWV and minute 43 and 44 on WWVH for GPS status and current or forecasted outages. Internet access is available from the World Wide Web at http://www.navcen.uscg.gov.
3. The NIS disseminates GPS Advisory Broadcast Messages through USCG broadcast stations using VHF-FM voice, HF-SSB voice, and NAVTEX broadcasts. The broadcasts provide the GPS user in the marine environment with the current status of the GPS satellite constellation, as well as any planned/unplanned system outages that could affect GPS navigational accuracy. Information is provided in message format via an established system of message dissemination. NIS provides the GPS Operational Advisory Broadcast information to NGA for broadcast in NAVAREA, HYDROLANT, or HYDROPAC messages. These messages are generally geared to the deep draft mariner. NGA also publishes a Weekly Notice to Mariners (NTM) containing USCG Marine Information Broadcasts and NGA broadcast warnings for a seven–day period.

To comment on any of these services or ask questions about GPS status, contact the NIS at:
Commanding Officer
U.S. Coast Guard NAVCEN
7323 Telegraph Road
Alexandria, VA 22315-3998
NIS Phone: (703) 313-5900
Fax: (703) 313-5920

The Civil GPS Service Interface Committee (CGSIC) was established to address issues and problems that relate to the civil use of GPS. The CGSIC is the official interface between civil GPS users and the GPS operators (DoD). The CGSIC consists of a General Committee, an Executive Panel, and three Subcommittees:
1. Timing Information
2. International Information
3. U.S. States and localities

The U.S. Department of Transportation Radionavigation and Positioning Staff chairs the CGSIC is. The U.S. Coast Guard Navigation Center (NAVCEN) is the deputy chair and administrator. Points of contact are:
CGSIC Executive Secretariat
Commanding Officer CGSIC
U.S. Coast Guard NAVCEN
7323 Telegraph Road
Alexandria, VA 22315-3998
Phone: (703) 313-5900
Fax: (703) 313-5920
E-mail: rcasswell@navcen.uscg.mil

The program manager for all U.S. Coast Guard civil GPS activities is:
Commandant (G-OPN)
U.S. Coast Guard
2100 2nd St. SW
Washington, DC 20593-0001
Phone: (202) 267-0980
Fax: (202) 267-4222

Additionally, the Coast Guard Navigation Center operates the maritime Differential GPS (DGPS) service. This service is a medium frequency (285 kHZ - 325 kHz), all weather, 24-hour a day augmentation to the GPS service that provides localized GPS pseudorange correction factors. DGPS Full Operational Capability (FOC) was achieved March 15, 1999. DGPS provides six second time to alarm integrity for GPS out of tolerance conditions and increased position accuracy. The specified accuracy of DGPS augmented fixes is 10 meters (2drms), though typical results are 1 to 3 meter accuracy. Forty-three (43) maritime sites provide DGPS coastal coverage of the continental US, the Great Lakes, Puerto Rico, the Western rivers, as well as Hawaii and portions of the Alaskan coast.

(56) GLOBAL POSITIONING SYSTEM (GPS) AND DIFFERENTIAL GPS (DGPS) INFORMATION. (Continued).

Information concerning DGPS status, including planned/unplanned system outages, is disseminated through local USCG Broadcast Notice to Mariners, NAVTEX broadcasts, and internet access at http://www.navcen.uscg.gov.

A Nationwide DGPS expansion provides terrestrial users an additional 29 NDGPS sites, with the combined services providing single coverage over more than 80% of the continental US.

(Supersedes NTM 1(56)03) (USCG)

(57) TELEVISION ANTENNAE INTERFERENCE WITH GPS.

It has come to the attention of the U.S. Coast Guard and Federal Communications Commission that certain consumer electronics-grade active VHF/UHF marine television antennas are causing operational degradation in the performance of Global Positioning System (GPS) receivers. This interference may be realized as a display of inaccurate position information or a complete loss of GPS receiver acquisition and tracking ability.

The interference is not limited to the GPS equipment onboard the vessel with the installed active marine television antennae. There have been reports of interference occurring on other vessels and installations operating up to 2000 feet away from vessels using such antennas.

In one particular case, the interference caused the position of the vessel as displayed on the electronic chart to move erratically and dramatically often across large expanses of land. As can be expected, various data displays indicated erroneous information such as excessive speeds. In these instances, the problem would occasionally correct itself while at other times required resetting the system. To the vessel's crew, these annoyances were frustrating and caused concerns that perhaps less obvious inaccuracies were occurring. Ultimately, this affected their confidence in the performance of the GPS and Electronic Chart Display and Information System.

If you are experiencing recurring outages or degradation of your GPS receiver operation, you should perform an on-off test of your TV antenna. If turning off the power to the antenna results in improvement in the GPS receiver performance, the antenna may be the source of interference in the GPS band. In that case, you should contact the manufacturer of the antenna and identify the symptoms.

The FCC identified the following models of marine television antennas as having potential problems during the investigation of GPS interference:

a. TDP (Tandy Distribution Products) Electronics – Mini state Electronic amplified UHF/VHF TV Antenna – Models 5MS740, 5MS750, AND 5MS921.

b. Radio Shack Corporation – Long Range Amplified omni directional TV antenna - Model 15-1624.

c. Shakespeare Corporation – Seawatch - Models 2040/Code Date 02A00, 2050/Code Date 03A00 (Code dates are found on the antenna power supply).

The GPS interference problems may not be limited to the marine television models listed above. If mariners identify another marine television antenna, not listed above, with GPS interference problems contact the watchstander at the Coast Guard Navigation Information Service at nisws@navcen.uscg.mil or telephone (703) 313-5900.

(Supersedes NTM 1(57)03) (USGC)

(58) DIGITAL SELECTIVE CALLING DISTRESS ALERT.

Digital selective calling (DSC) is a capability offered with some VHF and HF maritime radios, intended to initiate calls and provide distress alert information to the U.S. Coast Guard and other rescue coordination centers. DSC is a major element of the Global Maritime Distress and Safety System (GMDSS), an International Maritime Organization-mandated telecommunications system required on vessels subject to the provisions of the Safety of Life at Sea Convention (SOLAS). All vessels should interconnect their GPS with their DSC radios to provide an accurate position in the event of sending a distress alert. The interconnection of the DSC radio with the GPS is required for SOLAS vessels and is required by the International Telecommunications Union for non-SOLAS vessels.

Coast Guard Communications Stations operate MF and HF DSC, and can be reached using the Maritime Mobile Service Group Identity (MMSI) 003669999. The United States has not declared GMDSS Sea Areas A1 or A2 effective. Medium frequency installations are ongoing. A contract has been awarded for the installation of VHF FM DSC equipment with completion scheduled for 2006. Until then, the Coast Guard cannot receive a VHF DSC distress alert unless a mariner with a DSC-compatible radio receives an alert and relays it to the Coast Guard. Mariners receiving a VHF distress alert should attempt to contact the vessel sending the distress alert and obtain information concerning the distress, and then contact the

(58) DIGITAL SELECTIVE CALLING DISTRESS ALERT. (Continued).

Coast Guard to pass on this information. The Coast Guard will treat these alerts as legitimate distress calls. Continue listening on the working channel to ensure communications between the Coast Guard and ship in distress is established. Finally, be ready to provide further assistance if asked by the Coast Guard.
(Repetition NTM 1(58)03) (USCG)

(59) VESSEL SQUAT IN SHALLOW WATER.

The following discussion is primarily aimed towards mariners who are navigating ocean-going commercial vessels on approaches to ports, where water depths are beginning to shoal (less than 3 times the ship's draft). The discussion describes the phenomenon of "squat" and is intended to help mariners recognize circumstances where it could significantly affect the navigational draft of their vessels.

In August 1992, a 950-foot passenger liner ran aground in an area where the charted depth of 39 feet was more than 7 feet greater than the vessel's maximum calculated draft. One major contributing factor was that neither the master nor the pilot adequately judged the considerable squatting effect (sinkage & trim) caused by the high-speed transit (24.5 knots) in relatively shallow water (which was about 1.22 times the ship's draft).

DISCUSSION OF SQUAT: The term "squat" describes the combination of sinkage (overall settling of the hull) and trim (the bow up/down rotation of the hull). This phenomenon occurs in waters of any depth, but is particularly affected by the proximity to the sea floor. Therefore, the effects of squat become more pronounced in shallow and/or restricted waters (such as canals or dredged channels). As a ship moves forward, water must quickly flow around and under the hull to fill the void left behind. This accelerated water flow affects the pressure distribution along the hull. Consequently, the vessel squats, effectively increasing its draft and trim. Depending upon the vessel's speed and hull form, the ship may trim by either the bow or the stern. Generally, full-bodied hulls (where C_b>0.7, such as tankers) tend to trim by the bow, whereas fine-bodied hulls (such as container ships) tend to trim by the stern.

SHALLOW WATER EFFECTS: Shallow water affects a ship in two manners: squat (which increases the effective draft at bow and/or stern), and maneuverability (which reduces maneuvering responses compared to open, deep water performance). Also, the faster the vessel's speed, the greater the magnitude of the effects.

CALCULATION OF SQUAT: Squat is a function of the vessel's speed through the water, the ratio of ship draft to water depth, the ratio of cross-sectional areas of the hull and channel, the block coefficient of the hull, and other factors. Formulas for predicting squat for any particular ship are complex and may not be practical for direct use by mariners. However, a useful "rule of thumb" can be used as long as mariners understand its limitations, as discussed below.

In general, shallow water effects can begin to appear when water depth is less than 3 times the vessel's draft, and can become significant by the time water depth is less than 1.5 times the draft. For a ship in unrestricted shallow water (i.e., not within the confines of a dredged channel or canal), a conservative rule-of-thumb for estimating squat is:

$S = 0.033C_bV^2$

[where: s = squat (*ft*), V = ship speed, including any head current (*knots*), and C_b = block coefficient of hull]. For example: at 15 knots, the squat for a container ship (C_b = 0.60) proceeding against a 1-knot head current would be approximately 5.1 feet and for a tanker (C_b = 0.85) would be approximately 7.2 feet.

The estimated squat should be added to the deepest calculated draft of the vessel (bow or stern). This rule-of-thumb conservatively overestimates the squat of a ship and is therefore considered to be safe for operational decisions.

However, the above rule-of-thumb is valid only when the ship's speed is less than:

V<2.52 x *SQRT(d)*

[where V = ship speed (*kts*), and *SQRT(d)* = square root of the water depth *"d"* (*ft*)]. For example: in 50 feet of water, the above squat estimate is valid only if the ship's speed is less than 17.8 knots. As the ship moves into shallower water, the limiting speed will decrease. For example, in 30 feet of water, the limiting speed for the rule-of-thumb reduces to 13.8 knots. If the ship's speed is faster than the limiting speed, then the squat prediction is no longer reliable and a greater squat should be assumed. Therefore, if the ship maintains a constant speed as it proceeds into shallower water, it may eventually exceed the limiting speed and experience a significant increase in squat.

(59) VESSEL SQUAT IN SHALLOW WATER. (Continued).

If the block coefficient C_b is not known, it may be approximated as follows:

$C_b = 35Disp/(LBT)$

[where Disp = full-load displacement (*long tons*), L = length between perpendiculars (*ft*), B = beam (*ft*), and T = full-load draft (*ft*)]. For example, the block coefficient C_b of a container ship 810'L x 106'B x 36'T with a full-load displacement of 51,710 Ltons is approximately 0.59.

UNDERKEEL CLEARANCE: When evaluating the underkeel clearance in shallow waters, mariners are advised to also take into account the wave-induced motions of the ship (heave and pitch), the uncertainty within their own draft & trim calculations, as well as a prudent margin for uncertainty in the charted water depths (even modern hydrographic surveys may not locate all sea floor obstructions or the shallowest depths). In particular, sudden changes in water depth (such as passing over a shoal area) can cause transient squat effects that can be more substantial than predicted. Similarly, sudden changes in ship speed (acceleration or deceleration) can also cause transient changes in squat. For broad-beamed ships with a relatively "tender" rolling periods (such as modern, post-Panamax container ships), rolling motions can significantly increase drafts at the bilges, in addition to the effects of squat.

MANEUVERABILITY: In addition to squat, the mariner should also be aware that shallow water may increase turning diameter. Modeling of tankers has shown an increase in turning diameter of 60% to 100% in water less than 1.25 times the ship's draft. Hydrodynamic effects such as yawing and sheering should also be taken into account in shallow and restricted waters, especially when passing another vessel. Also, the vessel will require substantially more revolutions to maintain the same speed (during sea trials with a 270-foot destroyer drawing 8 feet of water, the ship required 400 rpm to reach 22 knots in 100 feet of water, but nearly 500 rpm to maintain the same speed in 45 feet of water).

RESTRICTED WATERS: When the ship is transiting shallow restricted waters (such as a dredged channel within a shallow bay), the hydrodynamic flow around the hull is confined by the banks of the channel, creating a different pressure distribution and aggravating the squat condition (usually by increasing the stern squat). The squat estimated by the above "rule of thumb" should be doubled. Maneuverability is also further degraded; which is of particular concern when passing (meeting or overtaking) another vessel in the waterway or when maneuvering near banks or in channel curves.

RECOGNIZING SHALLOW WATER EFFECTS: Signs that a ship has entered shallow water conditions can include one or more of the following:

- Vibration increases suddenly,
- Engine loads down and revolutions decrease,
- Wavemaking increases, especially at the bow,
- Ship becomes more stable and slower to respond to controls,
- Echo sounders indicate a change in clearance or depth,
- The shaft horsepower (shp) speed decreases at the same engine revolutions,
- Water flow around the ship changes, and water color darkens (possibly indicating entrained mud).

REGULATIONS: The Code of Federal Regulations (CFR) requires that the person directing the movement of the vessel set the vessel's speed with consideration for the tendency of the vessel underway to squat and suffer impairment of maneuverability when there is small underkeel clearance [33 CFR 164.11(p)(3)]. In addition, the International Maritime Organization recommends that ships be provided with a bridge poster, a pilot card, and a maneuvering booklet. These should include information on the squat and maneuvering characteristics for that particular vessel [see also USCG Navigation Safety Inspection Circular 7-89].

For more information, contact:

Commandant, U.S. Coast Guard
Naval Architecture Division (G-MSE-2)
2100 Second Street S.W.
Washington, D.C. 20593-2967
Telephone: (202) 267-2988

(Repetition NTM 1(59)03) (USCG)

(60) PROMULGATION OF MARITIME SAFETY INFORMATION BY U.S. INFORMATION PROVIDERS.

The purpose of this information is to provide mariners with the details of the promulgation of Maritime Safety Information (MSI) via the Global Maritime Distress and Safety System (GMDSS) by U.S. information providers, namely the National Geospatial-Intelligence Agency (NGA), the U.S. Coast Guard (USCG), and the National Weather Service (NWS).

The equipment needed to receive MSI is a GMDSS type-approved Inmarsat-C transceiver for SafetyNET broadcasts via Inmarsat satellites and a NAVTEX receiver for Coastal Warnings. SafetyNET is an international service for the broadcast and automatic reception of MSI by means of direct printing through Inmarsat's Enhanced Group Call (EGC) system. NAVTEX is an internationally coordinated system for the automatic reception of MSI via MF 518 kHz. The area of coverage for the United States is NAVAREA/METAREA IV and XII for SafetyNET and for NAVTEX, approximately 200 nautical miles from each NAVTEX station (see graphic, page I-1.61). Additionally, the NWS is providing further coverage for NAVAREA/METAREA XVI (Peru) for weather forecasts and warnings.

The major categories of MSI in the United States for both SafetyNET and NAVTEX are:

a. navigational warnings (including electronic navigation system messages such as Loran-C and GPS)
b. meteorological warnings
c. ice reports
d. search and rescue information
e. meteorological forecasts

The following table details the scheduled times for the U.S. information providers and what types of broadcasts are being sent. For a depiction of the Inmarsat satellite footprints overprinted on the worldwide NAVAREA/METAREAS, see the graphic on page I-1.37.

In order to ensure that all relevant SafetyNET MSI is received before sailing, it is recommended that the Inmarsat-C receiver remain in operation while the ship is in port. To receive SafetyNET traffic automatically, the ship's receiver must be set up properly at the start of the voyage:

a. select the appropriate satellite (AOR-W, AOR-E, POR, IOR)
b. enter extra NAVAREA/METAREA codes in addition to the one that the vessel is currently in, if desired
c. key in the ship's position and ensure a periodic update (at least every 12 hours is recommended). This determines the NAVAREA/METAREA that will be monitored. If the position is not updated for more than 12 hours, ONLY geographically addressed messages with priorities greater than routine within the entire ocean region will be printed out.

In order to ensure that all relevant NAVTEX MSI is received before sailing, it is recommended that the NAVTEX receiver remain in operation while the ship is in port. To receive MSI automatically via NAVTEX, the ship's NAVTEX receiver must be programmed with the desired NAVTEX stations and subject identifiers.

It is intended that all NAVTEX weather be broadcast with subject indicator "B," for Meteorological Warnings, which cannot be rejected by the NAVTEX receiver, or "E" for routine forecasts. However, this cannot be fully implemented at the present time within the U.S. Therefore, all mariners in U.S. waters should program their NAVTEX receivers to include subject indicator "E" in order to receive both warnings and routine weather forecasts via NAVTEX.

The repetition rates of SafetyNET and NAVTEX messages vary, depending on the type of broadcast and situation. NAVTEX messages are generally repeated at each scheduled time slot until canceled (usually every four hours). SafetyNET weather forecast messages from the NWS normally are sent once unless an unscheduled warning is being issued, in which case an echo is used. The echo is rebroadcasted six minutes after the initial transmission to give vessels which are transmitting at the time of the initial broadcast another opportunity to receive the message.

NGA promulgates all of its SafetyNET messages (which do not have a known cancellation within 24 hours of the initial broadcast) once each day until canceled. Those messages canceling others and those with a known expiration within 24 hours are sent only once.

For search and rescue, the USCG determines the repetition of the broadcast depending upon the type of incident, area of the incident, and known potential rescue vessels.

The USCG's International Ice Patrol, which sends SafetyNET messages concerning the status of ice in the Atlantic Ocean, sends its traffic once.

All type-approved Inmarsat SafetyNET and NAVTEX receivers are designed to suppress redundant copies of correctly copied messages.

Beginning 2004, National Weather Service hurricane advisories, and high seas forecasts containing warnings of hurricanes not forecast to occur within 48 hours, will be broadcast via SafetyNET with a priority code of "Safety" versus "Urgent".

For further discussion of GMDSS and its many aspects, users are encouraged to read the appropriate chapter in The American Practical Navigator (Bowditch) and/or in Publication 117, Radio Navigational Aids. Pub. 117 also lists in-depth worldwide GMDSS coverage. Other valuable GMDSS reference sources include:

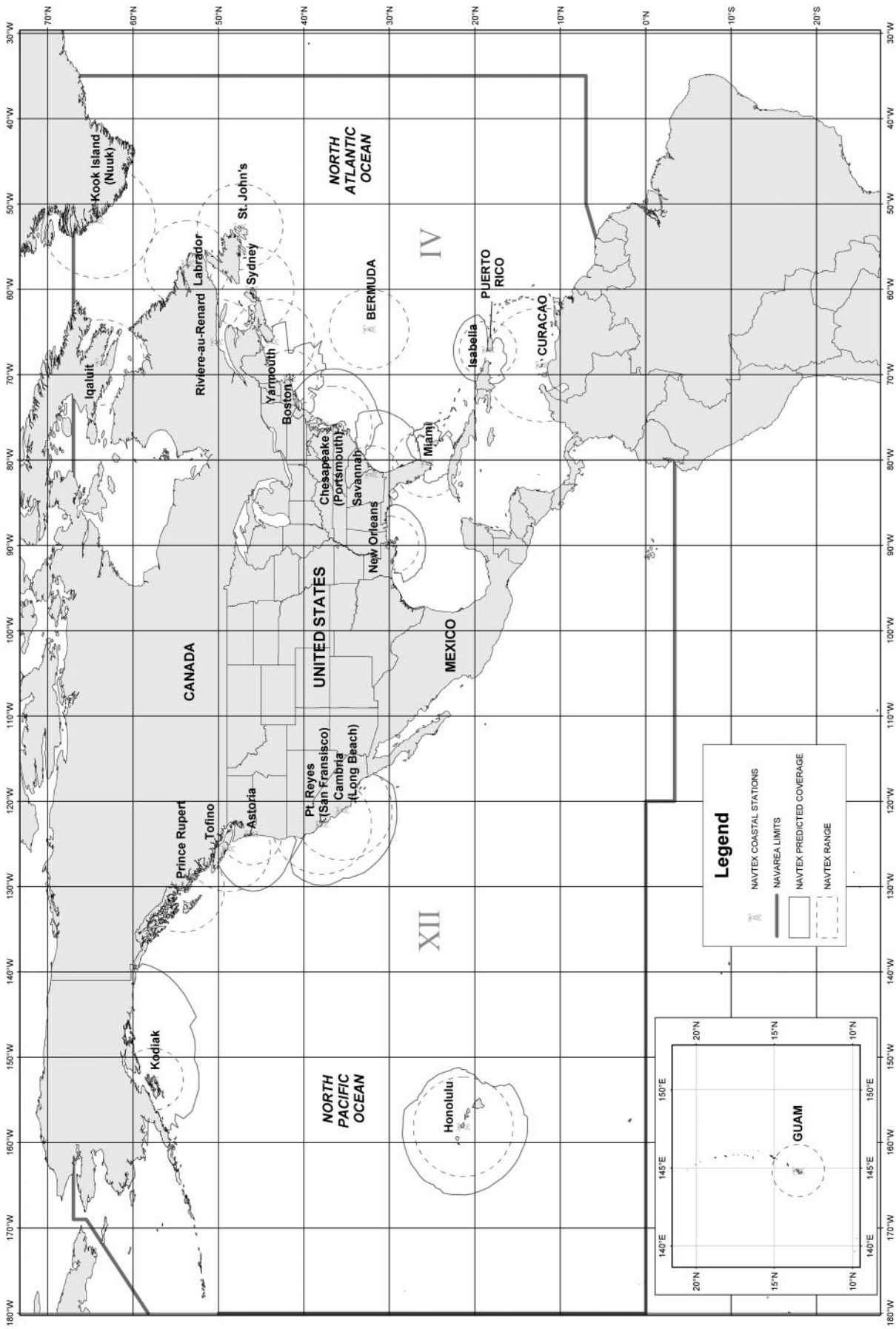
(60) PROMULGATION OF MARITIME SAFETY INFORMATION BY U.S. INFORMATION PROVIDERS. (Continued).

IMO Newsletters
NOAA Mariners Weather Log (http://www.vos.noaa.gov)
USCG Amver Bulletins
USCG Local Notice to Mariners
British Admiralty List of Radio Signals, Volumes 3 and 5
Many commercial maritime magazines

SCHEDULED BROADCAST TIMES

WHAT	WHO	WHEN (UTC)	HOW	NAVAREA/ METAREA	SATELLITE
High seas warnings and forecasts	NWS	0430, 1030, 1630, 2230	SafetyNET	IV	AOR-W
High seas warnings and forecasts	NWS	0545, 1145, 1745, 2345	SafetyNET	XII	AOR-W/POR
High seas warnings and forecasts	NWS	0515, 1115, 1715, 2315	SafetyNET	XVI	AOR-W
Hurricane advisories West Atlantic	NWS	as required	SafetyNET	IV	AOR-W
Hurricane advisories East Pacific	NWS	as required	SafetyNET	XII	POR/AOR-W
Hurricane advisories Central Pacific	NWS	as required	SafetyNET	XII	POR
Long range navigational warnings	NGA	1000, 2200	SafetyNET	IV	AOR-W
Long range navigational warnings	NGA	1030, 2230	SafetyNET	XII	POR/AOR-W
Long range search and rescue	USCG	upon receipt	SafetyNET	IV/XII	AOR-W/POR
Coastal MSI	USCG	4 to 6 times daily for routine traffic; upon receipt for distress	NAVTEX	Generally, within 200 miles of the coastline	None; see Pub 117 for stations and times
Status of ice in North Atlantic Ocean	USCG	twice daily 0000, 1200	SafetyNET	IV	AOR-W

(Supersedes NTM 1(60)03) (USCG/NGA)


NORTH ATLANTIC OCEAN
NORTH PACIFIC OCEAN
CANADA
UNITED STATES
MEXICO
BERMUDA
PUERTO RICO
CURACAO
GUAM
IV
XII
Kook Island (Nuuk)
Iqaluit
Labrador
Rivere-au-Renard
St. John's
Sydney
Yarmouth
Boston
Chesapeake (Portsmouth)
Savannah
Miami
Isabella
New Orleans
Pt. Reyes (San Fransisco)
Cambria
(Long Beach)
Astoria
Tofino
Prince Rupert
Kodiak
Honolulu
Legend
NAVTEX COASTAL STATIONS
NAVAREA LIMITS
NAVTEX PREDICTED COVERAGE
NAVTEX RANGE

(61) COAST GUARD SAFETY INFORMATION AVAILABLE ON INTERNET.

The United States Coast Guard Navigation Information Service (NIS), operated by the USCG Navigation Center, provides information for all radionavigation and maritime telecommunications systems. The NIS is staffed 24 hours a day, 7 days a week, providing information on the current operational status, effective policies, and general information for Global Positioning System (GPS), Differential GPS (DGPS), Loran-C, Universal Shipborne Automatic Identification System (AIS), and the Global Maritime Distress and Safety System (GMDSS), including NAVTEX, Digital Selective Calling (DSC), Inmarsat SafetyNET, and other Maritime Safety Information (MSI) broadcasts. Access to this information can be made directly, at no charge, via the Internet at http://www.navcen.uscg.gov.

The NIS also disseminates Safety Broadcasts (BNM), Local Notice to Mariners (LNM) and the latest Notice Advisory to Navstar Users (NANU). NANU notices can also be obtained via e-mail subscription through the USCG Navigation Center website (http://www.navcen.uscg.gov/gps/default.htm). In addition, the NIS investigates all reports of degraded or loss of GPS, DGPS or LORAN-C service. Mariners are encouraged to report all degradation, outages, or other incidents or anomalies of radionavigation services to the NIS via any of the following: Phone: 703-313-5900, E-mail: webmaster@navcen.uscg.mil, or on the World Wide Web at http://www.navcen.uscg.gov.

(Repetition NTM 1(61)03) (USCG)

(62) NATIONAL OCEAN CLAIMS.

The following list shows national claims of maritime jurisdiction. Publication of this material is solely for information relative to the navigational safety of shipping and in no way constitutes legal recognition by the United States. The information has been compiled from the best available sources.

Country	Territorial Sea	Fisheries or Economic Zone	Contiguous Zone	Continental Shelf
Albania	12*	15	---	200m or E
Algeria	12*	32-52	---	---
Angola	12	200	24	---
Antigua and Barbuda**	12*	200	24	200NM or CM
Argentina	12* (1)	200	24	200NM or CM
Australia	12 (2)	200	24	200NM or CM
Bahamas, The**	12	200	---	200m or E
Bahrain	12	---	24	---
Bangladesh	12*	200	18 (3)	CM
Barbados	12*	200	---	---
Belgium	12	200 (4)	---	CS (4)
Belize	12 (5)	200	---	---
Benin	200	200	---	---
Bosnia-Herzegovina	--- (6)	---	---	---
Brazil	12* (7)	200 (7)	24	---
Brunei	12	200 (8)	---	---
Bulgaria	12* (9)	200	24	200m or E (9)
Burma	12* (10)	200	24 (10)	200NM or CM
Cambodia	12*	200	24 (11)	200NM

(62) NATIONAL OCEAN CLAIMS. (Continued).

Cameroon	12	---	---	---
Canada	12 (12)	200	24	200NM or CM
Cape Verde**	12*	200	24	200NM
Chile	12	200	24	200/350NM
China	12*	200 (13)	24 (13)	200NM or CS
Colombia	12	200	---	200m or E
Comoros**	12	200	---	---
Congo(Brazzaville)	200*	---	---	---
Congo(Kinshasa)	12	--- (14)	---	---
Cook Islands	12	200	---	200NM or CM
Costa Rica	12	200 (15)	---	200NM
Côte d'Ivoire	12	200	---	200NM
Croatia	12*	---	---	200m or E
Cuba	12 (16)	200	---	200m
Cyprus	12	---	---	200m or E
Denmark	12* (17)	200		200m or E
Djibouti	12 (18)	200	24	---
Dominica	12	200	24	---
Dominican Republic	6 (19)	200	24	200NM or CM
East Timor	12	200	24	200NM or CM
Ecuador	200 (20)	---	---	--- (20)
Egypt	12* (21)	200	24 (21)	200m or E
El Salvador	200 (22)	---	---	---
Equatorial Guinea	12	200	---	---
Eritrea	(23)	---	---	---
Estonia	12 (24)	--- (24)	---	---
Fiji**	12	200	24	200m or E
Finland	12*(25)	12	6	200m or E
France	12 (26)	200 (26)	24	200m or E
Gabon	12	200	24	---
Gambia, The	12	200	18	---
Georgia	--- (27)	---	---	---
Germany	12	200	---	200m or E
Ghana	12	200	24	200NM
Greece	6 (28)	---	---	200m or E
Grenada	12*	200	---	---

(62) NATIONAL OCEAN CLAIMS. (Continued).

Guatemala	12 (29)	200	---	200m or E
Guinea	12	200	---	---
Guinea-Bissau	12	200	---	---
Guyana	12*	200	---	200NM or CM
Haiti	12 (30)	200	24 (30)	E
Honduras	12 (31)	200	24	---
Iceland	12	200	---	200NM or CM
India	12*	200	24 (32)	200NM or CM
Indonesia**	12 (33)	200	---	---
Iran	12*	--- (34)	24 (34)	--- (34)
Iraq	12	---	---	CS
Ireland	12	200	---	CS
Israel	12	---	---	E
Italy	12 (35)	---	---	200m or E
Jamaica**	12	200	24	200NM or CM
Japan	12 (36)	200	24	200NM or CM
Jordan	3	---	---	---
Kenya	12 (37)	200	---	200m or E
Kiribati**	12	200	---	---
Korea, North (DPRK)	12* (38)	200	50 (38)	---
Korea, South (ROK)	12* (39)	200	24	CS
Kuwait	12	---	---	---
Latvia	12	200	---	200m or E
Lebanon	12	---	---	---
Liberia	200	---	---	---
Libya	12* (40)	---	---	CS
Lithuania	12	---	---	---
Madagascar	12	200	24	200NM (41)
Malaysia	12 (42)	200	---	200m or E
Maldives**	12*	200	24	---
Malta	12*	25	24	200m or E
Marshall Islands**	12	200	24	---
Mauritania	12 (43)	200	24	200NM or CM
Mauritius	12*	200	---	200NM or CM
Mexico	12 (44)	200	24	200NM or CM
Micronesia, Federated States of	12	200	---	---

(62) NATIONAL OCEAN CLAIMS. (Continued).

Monaco	12	---	---	---
Morocco	12	200	24	200m or E
Mozambique	12	200	---	---
Namibia	12	200	24	200NM or CM
Nauru	12	200	24	---
Netherlands	12* (45)	200	---	---
New Zealand	12 (46)	200 (46)	24	200NM or CM
Nicaragua	12*	200	24	---
Nigeria	12	200	---	200m or E
Niue	12	200	---	---
Norway	4	200	10	200NM or CM
Oman	12*	200	24	---
Pakistan	12* (47)	200	24 (47)	200NM or CM
Palau	3	200	---	---
Panama	12(48)	200	24	200NM or CM
Papua New Guinea**	12	200	---	200m or E
Peru	200 (49)	---	---	200
Philippines**	--- (50)	200	---	E
Poland	12 (51)	200 (51)	---	---
Portugal	12 (52)	200	24	200m or E
Qatar	12	--- (53)	24	CS
Romania	12*	200	24	200m or E
Russia	12	200	---	200m or E
Saint Kitts and Nevis	12	200	24	200NM or CM
Saint Lucia	12	200	24	200NM or CM
Saint Vincent and the Grenadines**	12*	200	24	---
Samoa	12	200	---	---
Sao Tome and Principe**	12	200	---	---
Saudi Arabia	12 (54)	---	18 (54)	CS
Senegal	12	200	24	200NM or CM
Serbia and Montenegro	12	---	---	---
Seychelles**	12*	200	24	200NM or CM
Sierra Leone	200	---	---	200NM
Singapore	3	---	---	---
Slovenia	--- * (55)	---	---	---
Solomon Islands**	12	200	---	200NM

(62) NATIONAL OCEAN CLAIMS. (Continued).

Somalia	200*	---	---	---
South Africa	12	200	24	200NM or CM
Spain	12 (56)	200 (56)	24	---
Sri Lanka	12* (57)	200	24 (57)	200NM or CM
Sudan	12*	---	18 (58)	200m or E
Suriname	12	200	---	---
Sweden	12 (59)	200	---	200m or E
Syria	35*	---	41 (60)	200m or E
Tanzania	12	200	---	---
Thailand	12 (61)	200	---	---
Togo	30	200	---	---
Tonga	12 (62)	200	---	200m or E
Trinidad and Tobago **	12	200	24	200NM or CM
Tunisia	12 (63)	---	24	---
Turkey	(64)	200 (64)	---	---
Tuvalu	12	200	24	---
Ukraine	12	200	---	200m or E
United Arab Emirates	12*	200 (65)	24	200NM or CM
United Kingdom	12	200 (66)	---	Defined by coordinates
United States	12	200 (67)	24	200NM or CM
Uruguay	12 (68)	200	24	200NM or CM
Vanuatu **	12	200	24	200NM or CM
Venezuela	12	200	15 (69)	200m or E
Vietnam	12* (70)	200	24 (70)	200NM or CM
Yemen	12* (71)	200	24 (71)	200NM or CM

Abbreviations:

CS - Continental Shelf (no specified limits)
CM - Continental Margin
E - Limit of Exploitation
m - meters (depth)
NM - nautical miles

* Indicates a state which requires advance permission or notification for innocent passage of warships in the territorial sea. The United States does not recognize this requirement.

** Indicates an archipelagic state.

FOOTNOTES

Security Zone - A state claim to control activity beyond its territorial sea for security reasons unrelated to that state's police powers in its territory, including its territorial sea. This Summary lists only those Security Zones which presently claim to restrict navigation and overflight activities conducted exclusively beyond their claimed territorial seas. A claim of right of surveillance beyond the territorial sea or a claim of the right of "hot pursuit" in enforcing violations of law which occur in a

(62) NATIONAL OCEAN CLAIMS. (Continued).

state's territorial sea, inland waters, or land territory does not constitute a claimed Security Zone.

Fishery zones not extending beyond a claimed territorial sea or EEZ are encompassed within the territorial sea or EEZ and not listed separately.

Many coastal nations have established straight baselines or have asserted historic waters claims. These footnotes mention some of the more significant ones. It exceeds the scope of this Summary, however, to provide an exhaustive list of baseline and historic waters claims. Accordingly, users should refer to other sources of information to obtain a complete compendium of maritime claims.

1. Argentina. Claims San Matias Gulf (Golfo San Matias), Nuevo Gulf (Golfo Nuevo) and San Jorge Gulf (Golfo San Jorge) as internal waters and claims, jointly with Uruguay, the Rio de la Plata estuary as internal waters.

2. Australia. Claims Anxious, Rivoli, Encounter and Lacepede Bays as historic waters.

3. Bangladesh. Contiguous Zone also considered a Security Zone. Nuclear-powered vessels and vessels transporting nuclear materials or other radioactive substances are required to give notice prior to entering territorial sea.

4. Belgium. Fishery zone and CS extend to median line equidistant from baseline of neighbors.

5. Belize. From the mouth of the Sarstoon River to Ranguana Cay, Belize's territorial sea is 3NM; according to Belize's Maritime Areas Act, 1992, the purpose of this limitation is "to provide a framework for the negotiation of a definitive agreement on territorial differences with the Republic of Guatemala."

6. Bosnia-Herzegovina. No information on maritime claims is available.

7. Brazil. Claims to require permission for more than 3 warships of same flag to be in territorial sea at same time. Military exercises can be carried out in EEZ only with Brazil's consent.

8. Brunei. 200NM or median EEZ.

9. Bulgaria. In territorial sea and internal waters, foreign submarines shall be required to navigate on the surface. Innocent passage of warships limited to designated sea lanes. CS limits will be established by agreement between states with adjacent or opposite coasts on Black Sea on basis of international law.

10. Burma. Claims as internal waters all waters inside a 223NM baseline closing Gulf of Martaban as well as waters inside straight baselines connecting coastal islands. Contiguous Zone also considered a Security Zone.

11. Cambodia. Contiguous Zone also considered a Security Zone.

12. Canada. Claims as internal waters all waters between its islands in the Arctic; also claims Hudson Bay as a historic bay.

13. China. Claims right to create safety zone around any structure in EEZ, right to require prior authorization to lay submarine cables and pipelines, and right to broad powers to enforce laws in the EEZ. Contiguous Zone also considered a Security Zone.

14. Congo. EEZ limits to be fixed in coordination with neighboring states.

15. Costa Rica. Permit required for foreign flag fishing vessels to transit Costa Rican waters.

16. Cuba. Claims straight baselines enclosing varying distances of water between Cape Frances (Cabo Frances), the Isle of Pines (Isla de la Juventud) (notable are those enclosing 21-35.6N and 79-50.5W), Breton Cay (Cayo Breton) and Cape Cruz (Cabo Cruz) as internal waters.

(62) NATIONAL OCEAN CLAIMS. (Continued).

17. Denmark. No prior notification required in straits, unless more than 3 warships at once. Includes Greenland and Faroe Islands. Straight baselines have the effect of enclosing waters between the Faroe Islands. Drogden and Hollænderdyb claimed as internal waters. 3NM territorial sea for Faroe Islands and Greenland.

18. Djibouti. Nuclear-powered vessels and vessels transporting nuclear materials or other radioactive substances are required to give notice prior to entering territorial sea.

19. Dominican Republic. Claims Samana, Ocoa, Neiba, Escocesa and Santo Domingo Bays as historic bays; Samana, Ocoa and Neiba bays qualify as juridical bays.

20. Ecuador. Straight baselines have the effect of enclosing waters between the Galapagos Islands. Claims right to enforce environmentally-based navigational restrictions in the vicinity of the Galapagos. Beyond 200NM, CS claimed along the undersea Carnegie Ridge (measured 100 miles from the 2500m-depth isobath).

21. Egypt. Contiguous Zone also considered a Security Zone. Claims right to prior permission for entry of nuclear-powered vessels or vessels carrying nuclear materials and foreign ships carrying hazardous or other wastes.

22. El Salvador. Claims the right to exercise sovereignty and jurisdiction over the sea, the seabed and seafloor to 200NM. Claims Gulf of Fonseca (Golfo de Fonseca) as a historic bay.

23. Eritrea. No information on maritime claims is available.

24. Estonia. Nuclear-powered ships must apply for permission 30 days in advance to enter territorial sea. Innocent passage prohibited for ships carrying radioactive materials, explosives and marine pollutants defined as hazardous and certain oil and fertilizer products unless those cargoes are loaded or unloaded in an Estonian port. Fishery zone limits to be fixed in coordination with neighboring states.

25. Finland. In the Gulf of Finland territorial sea is 3NM.

26. France. Territorial sea limits apply to all French dependencies. EEZ claim includes the following French dependencies: Clipperton Island, French Guiana, French Polynesia, French Southern and Antarctic Lands, Guadeloupe, Glorioso Islands, Juan de Nova Island, Europa Island, Bassas da India, Martinique, New Caledonia, St. Pierre and Miquelon, Tromelin Island, and Wallis and Futuna.

27. Georgia. No information on maritime claims is available.

28. Greece. Territorial airspace claim extends to 10NM for control of civil aviation.

29. Guatemala. Claims Gulf of Amatique (Bahia de Amatique) as a historic bay.

30. Haiti. Draws territorial sea limits in a manner which implies straight baselines including across the mouth of the Gulf of Gonave (Golfe de la Gonave). Contiguous Zone also considered a Security Zone.

31. Honduras. Claims Gulf of Fonseca (Golfo de Fonseca) as a historic bay.

32. India. Contiguous Zone also considered a Security Zone. Claims Gulf of Mannar and Palk Bay as historic waters.

33. Indonesia. Submarines must navigate above water level and show national flag. Nuclear vessels and vessels carrying nuclear material must carry documents and adhere to international special preventative measures.

34. Iran. Claims security jurisdiction in Contiguous Zone. Fishery zone and CS extend to median line equidistant from baseline of neighbors.

35. Italy. Claims the Gulf of Taranto (Golfo di Taranto) as a historic bay.

(62) NATIONAL OCEAN CLAIMS. (Continued).

36. Japan. Claims straight baselines. A high seas corridor remains in 5 “international straits”: Tsugaru Strait (Tsugaru-kaikyo), La Perouse Strait, Osumi Strait (Osumi-kaikyo) and East and West channels of Tsushima.

37. Kenya. Established straight baseline system. Claims Ungwana Bay as a historic bay.

38. Korea, North (DPRK). Measures claims from claimed straight baselines, not coastline. Claims a 50/200NM Security Zone within which all foreign vessels and aircraft are banned without permission; it extends to 50NM in the Sea of Japan and to the limit of EEZ in the Yellow Sea.

39. Korea, South (ROK). Claims straight baselines. A high seas corridor remains in Korea Strait.

40. Libya. Claims the Gulf of Sidra as a historic bay. All merchant ships required to give prior notice of innocent passage.

41. Madagascar. CS 200NM or 100NM from 2500m-depth isobath.

42. Malaysia. Prior authorization requirement for nuclear-powered ships or ships carrying nuclear material to enter the territorial sea.

43. Mauritania. Claims 89NM straight baseline from Cape Blanc (Cap Blanc) to Cape Timiris (Cap Timiris).

44. Mexico. No more than 3 foreign warships will be authorized in Mexican ports on each coast at the same time, and no more than one in any given port. Port calls by more than one training vessel can be authorized only if permission is requested three months in advance. Nuclear-powered and nuclear-armed ships are not allowed to enter Mexican territorial waters or dock in Mexican ports.

45. Netherlands. Considers the Westerschelde internal waters through which passage requires prior permission. Includes Aruba and the Netherlands Antilles.

46. New Zealand. Includes Tokelau. Prohibits entry of nuclear-powered and nuclear armed ships into its ports.

47. Pakistan. Foreign supertankers, nuclear-powered ships and ships carrying nuclear materials are required to give prior notification for entry into territorial sea. Contiguous Zone also considered a Security Zone.

48. Panama. Claims Gulf of Panama as a historic bay.

49. Peru. 200 mile territorial sea is without prejudice to freedom of international communication, “in conformity with the laws and treaties ratified by the state.”

50. Philippines. In addition to its claim of archipelagic waters, claims as maritime territorial waters areas embraced within the lines described in the 1898 Treaty of Paris as subsequently modified. The resulting territorial sea varies from one-half to 285NM in width.

51. Poland. Claims a closing line across Gulf of Gdansk and a fishing zone to the median line in the Baltic. EEZ is determined by lines connecting extreme points of specified lateral limits.

52. Portugal. Established straight baselines for various areas along continental coast and Madeira and Azores island groups. Claims Tagus and Sado estuaries and associated bays as historic waters.

53. Qatar. Extends to median line with neighboring states.

54. Saudi Arabia. Claims power to regulate nuclear-powered vessels in the territorial sea and to require prior authorization for such vessels. Contiguous Zone also considered a Security Zone.

55. Slovenia. No information on maritime claims is available.

(62) NATIONAL OCEAN CLAIMS. (Continued).

56. Spain. Claims to control transit passage by aircraft and exercise pollution control over vessels in international strait. Claims 200NM Economic Zone in Atlantic only.

57. Sri Lanka. Contiguous Zone also considered a Security Zone. Claims Palk Bay, Palk Strait and Gulf of Mannar as historic waters.

58. Sudan. Contiguous Zone also considered a Security Zone.

59. Sweden. Territorial sea claim is less than 12NM (but varying) in certain areas of the Skagerrak, the Kattegat and the Baltic.

60. Syria. Claims Security Zone 6 miles beyond territorial sea limit.

61. Thailand. Claims inner Gulf of Thailand as a historical bay to 12°35'45"N.

62. Tonga. Claims 12NM territorial sea for Minerva Reef.

63. Tunisia. Claims straight baselines enclosing Gulf of Tunis (Khalij Tunis) and Gulf of Gabes (Khalij Gabes) as internal waters.

64. Turkey. Claims a 12NM territorial sea in the Black Sea and in the Mediterranean and a 6NM territorial sea in the Aegean. EEZ is claimed in the Black Sea.

65. United Arab Emirates. EEZ extends to agreed CS boundaries or to median lines.

66. United Kingdom. Fishery claims include Ascension, Bermuda, British Virgin Islands, Cayman Islands, Ducie and Oeno Atolls, Henderson Island, Pitcairn Island, St. Helena, Tristan da Cunha, Turks and Caicos Islands. Has also established a fishing zone around the Falkland/Malvinas Islands; although 200NM wide, the zone is only enforced to a distance of 150NM.

67. United States. EEZ applies to Northern Marianas (consistent with the Covenant), American Samoa, Guam, Puerto Rico, U.S. Virgin Islands and other U.S. possessions and territories.

68. Uruguay. Claims, jointly with Argentina, the Rio de la Plata estuary as internal waters.

69. Venezuela. Claims 15NM Security Zone.

70. Vietnam. Claims half of the Gulf of Tonkin as historic internal waters and uses straight baselines for measuring the territorial sea. Baselines purport to enclose portions of the South China Sea up to approximately 75NM in width as internal waters. Contiguous Zone also considered a Security Zone.

71. Yemen. Claims notice requirement for warships, nuclear-powered vessels and vessels transporting nuclear materials or other radioactive substances prior to entering the territorial sea. Contiguous Zone also considered a Security Zone.
(Supersedes NTM 1(62)03) (DEPT. OF STATE)

(63) U.S. ECONOMIC SANCTIONS: CONCERNS FOR MARINERS.

The Office of Foreign Assets Control ("OFAC") of the U.S. Department of the Treasury administers and enforces economic and trade sanctions based on US foreign policy and national security goals against targeted foreign countries, terrorists, international narcotics traffickers, and those engaged in activities related to the proliferation of weapons of mass destruction. Many of these programs directly impact mariners.

GENERAL CONCERNS FOR MARINERS:

U.S.-registered vessels and other vessels subject to U.S. jurisdiction, U.S. individuals (citizens or residents wherever located, and individuals located in the United States) and U.S. businesses (including their foreign branches and foreign firms' U.S. locations) are generally prohibited from providing maritime transportation, vessel chartering, brokerage services, marine insurance, or reinsurance services involving:

- Unlicensed shipments of goods where the country of origin is subject to a trade embargo;
- Unlicensed shipments of goods to or from countries subject to a trade embargo;
- Carriage of passengers to or from Cuba, Libya and Iran;
- The carriage of passengers who are nationals of Cuba;
- Shipments of goods in which there is an interest of a target government or a Specially Designated National of a country subject to comprehensive sanctions or, in the case of Cuba, an interest of any of their nationals;
- Waterborne transportation services to unapproved locations in Angola;
- The purchase of services or bunkering at ports located within the territory of countries subject to a trade embargo.

It is important to note that U.S. sanctions programs vary considerably and what is prohibited with regard to one country may be permitted or licensable with regard to another.

GENERAL TRADE RESTRICTIONS BY COUNTRY:

The following summary provides a broad overview of trade sanctions administered by OFAC. In cases consistent with U.S. foreign policy, OFAC may issue licenses permitting transactions that would otherwise be prohibited. The exportation of pre-existing informational materials (such as books, publications, certain works of art, films etc.) is permitted to all countries except Iraq.

Please note that certain transactions may also be subject to licensing requirements of other U.S. government agencies (e.g. U.S. Departments of Commerce, State or Energy).

CUBA- No exportation or reexportation of goods, services, or technology to Cuba, except food, medicine, medical equipment, or agricultural commodities licensed by the U.S. Department of Commerce; no importation of goods or services from Cuba; no dealing in Cuban-origin goods or in property in which the Government of Cuba or a Cuban national has an interest; no brokering of Cuban trade contracts; no use, brokering, or insuring of Cuban-owned vessels. No vessel that enters a Cuban port to engage in the trade of goods or the purchase of services may enter a U.S. port to load or unload freight for a period of 180 days following departure from Cuba. No vessel carrying goods or passengers to or from Cuba or carrying goods in which Cuba or a Cuban national has an interest may enter a U.S. port with such goods or passengers on board. Travel-related transactions in Cuba require an OFAC license.

NORTH KOREA- Goods of North Korean origin may not be imported into the United States either directly or through third countries, without prior notification to and approval from OFAC.

LIBYA- No exportation of goods, services, or technology to Libya, except agricultural commodities and products, medicine, or medical equipment licensed by OFAC; no importation of goods or services from Libya; no dealing in Libyan-origin goods for export to another country or in property in which the Government of Libya has an interest; no brokering of Libyan trade contracts. Travel and transportation-related transactions to, from, and in Libya require an OFAC license.

IRAN- No exportation or reexportation of goods, services, or technology to Iran, except agricultural commodities and products, medicine, or medical equipment licensed by OFAC (general or specific license); no importation of goods or services from Iran, nor dealing in Iranian-origin goods, except for foodstuffs intended for human consumption (that are classified under chapters 2-23 of the Harmonized Tariff Schedule of the U.S.) and carpets and other textile floor coverings (that are classified under chapter 57 or heading 9706.00.60 of the Harmonized Tariff Schedule of the U.S.); no facilitation of foreign nationals' transactions with Iran; no brokering of unauthorized Iranian trade contracts.

(63) U.S. ECONOMIC SANCTIONS: CONCERNS FOR MARINERS. (Continued).

IRAQ- No exportation or reexportation of goods, services, or technology to Iraq; no importation of goods or services from Iraq; no dealing in Iraqi-origin goods or in property in which the Government of Iraq has an interest; no brokering of Iraqi trade contracts; no transfers to persons in Iraq; participation in UN "Oil for Food Program" involving purchases of oil and sales of food and medicine requires an OFAC license. Travel and transportation-related transactions to, from, and in Iraq require an OFAC license.

SUDAN- No exportation or reexportation of goods, services, or technology to Sudan, except agricultural commodities and products, medicine, or medical equipment licensed by OFAC; no importation of goods or services from Sudan; no dealing in Sudanese-origin goods or in property in which the Government of Sudan has an interest; no facilitation of foreign nationals' transactions with Sudan; no brokering of Sudanese trade contracts.

FEDERAL REPUBLIC OF YUGOSLAVIA MILOSEVIC/BALKANS- No exportation or reexportation of goods, services or technology to designated family members, supporters and members of the regime of former President Slobodan Milosevic or to persons deemed to be destabilizing the Western Balkans region; no importation of goods, services or technology and no brokering or other facilitation of trade with such designated persons; no dealing in property in which such designated persons have an interest. These individuals can be found on OFAC's list of Specially Designated Nationals and Blocked Persons (see below).

ANGOLA (UNITA)- No exportation of arms, arms materiel, petroleum, petroleum products, aircraft, or aircraft components, mining equipment, motorized vehicles, watercraft, spare parts for motorized vehicles or watercraft, mining services, or ground or waterborne transportation services to UNITA or unapproved locations in Angola; no dealings in property in which UNITA has an interest; no importation of uncertified diamonds from Angola.

BURMA (Myanmar)- No new investment that includes the economic development of resources in Burma; most trade in goods, services authorized.

LIBERIA- Prohibition on the direct or indirect importation of rough diamonds from Liberia.

SIERRA LEONE- Prohibition on the direct or indirect importation of rough diamonds not controlled through the Certificate of Origin Regime of the Government of Sierra Leone.

SYRIA- No receipt of unlicensed donations from the Government of Syria by U.S. persons; no financial transaction in which a U.S. person knows or has reasonable cause to believe poses a risk of furthering terrorist acts in the United States; normal commercial transactions not affected.

WEAPONS OF MASS DESTRUCTION- No importation of goods, technology, or services produced or provided by certain foreign persons designated by Secretary of State for having promoted the proliferation of weapons of mass destruction.

SPECIALLY DESIGNATED NATIONALS AND BLOCKED PERSONS (SDNs)

As part of its enforcement efforts, OFAC publishes a list of individuals and companies owned or controlled by, or acting for or on behalf of, targeted countries. It also lists individuals, groups, and entities, such as terrorists and narcotics traffickers designated under programs that are not country-specific. Collectively, such individuals and companies are called "Specially Designated Nationals" or "SDNs." U.S. persons are generally prohibited from dealing with SDNs and any property or assets in which an SDN has an interest must be blocked if under the control of a U.S. person.

OFAC JURISDICTION:

All U.S. citizens and permanent residents, companies organized in the United States, foreign branches of U.S. companies, individuals and entities located in the United States (including domestic affiliates of foreign companies), are subject to OFAC regulations. Furthermore, foreign subsidiaries of U.S. companies must comply with the sanctions against Cuba and North Korea. Such persons may not facilitate or assist foreign companies (e.g., as financiers, brokers, or other intermediaries) with transactions in which they themselves could not participate directly, and U.S. employees of foreign companies must ensure that they do not engage in transactions on behalf of their employer which would be prohibited if the company was American. Vessels subject to U.S. jurisdiction include:

(63) U.S. ECONOMIC SANCTIONS: CONCERNS FOR MARINERS. (Continued).

U.S. flag vessels;
vessels owned or controlled by U.S. companies;
vessels within U.S. waters;
for sanctions against Cuba and North Korea, vessels owned or controlled by foreign subsidiaries of U.S. companies.

SANCTIONS VIOLATIONS-THE PENALTIES:

Potential civil and criminal penalties, as well as the associated negative publicity resulting from a company's violation of U.S. sanctions, can prove to be strong motivational factors in getting a company to devote the appropriate time and resources to implementing quality OFAC compliance procedures. Civil penalties range from $11,000 to $1,000,000 per violation; criminal violations of the statutes administered by OFAC can result in corporate and personal fines of up to $10 million and 30 years in prison.

OFAC LICENSING:

OFAC has the authority to authorize transactions that would otherwise be prohibited under specific sanctions provisions. OFAC's Licensing Division reviews all license applications on a first-in, first-out, case-by-case basis and issues or denies licenses based on U.S. foreign policy and national security goals. The OFAC Licensing Division can be reached at by telephone (202) 622-2480 and by fax (202) 622-1657.

KEEPING CURRENT ON OFAC SANCTIONS PROGRAMS:

All of OFAC's public information documents are updated whenever there is a change to an existing program, or when a new program is announced. OFAC recommends that U.S. persons stay current on OFAC sanctions programs by utilizing some of the following user-friendly electronic resources:

World Wide Web (WWW) Home Page on the Internet- All of OFAC's program "brochures," as well as SDN information, are available free in downloadable camera-ready Adobe Acrobat© "*.PDF" format over the Treasury Department's World Wide Web Server. At the top of the home page, the date of OFAC's last change is displayed and a "What's New" file summarizes the latest sanctions developments. Access is also provided to statutes, United Nations resolutions, Executive Orders, actual *Federal Register* notices, and the entire *Code of Federal Regulations* dealing with OFAC. There are two listserv email subscription services available to the public on the site (see below). OFAC's Home Page site is http://www.treas.gov/ofac.

E-mail Subscription Service- OFAC offers two e-mail subscription services that provide subscribers with notices about changes and updates to OFAC's website. These voluntary services allow users to subscribe via the OFAC home page (http://www.treas.gov/ofac) to one of two separate distribution lists: financial operations bulletins geared toward the financial community, or "What's New" notices geared toward the general public (including exporters & importers, practicing attorneys, and researchers).

OFAC Fax-on-demand Service- OFAC operates a free automated fax-on-demand service, which can be accessed 24 hours a day, seven days a week, by dialing 202/622-0077 from any touch tone phone and following voice prompts. The Index lists all of the documents OFAC makes available by fax, and indicates the date each document was last updated.

U.S. Maritime Administration's Website- The U.S. Maritime Administration's website at http://marad.dot.gov contains a special link to OFAC's brochures and information, including a flashing indicator of latest updates.

U.S. Government Printing Office's The Federal Bulletin Board- The U.S. Government Printing Office operates a free bulletin board called "The Federal Bulletin Board" which can be accessed 24 hours a day, 7 days per week, by direct dialing 202/512-1387 from a modem using any communications software or using the Internet to connect to http://fedbbs.access.gpo.gov.

(63) U.S. ECONOMIC SANCTIONS: CONCERNS FOR MARINERS. (Continued).

U.S. Customs Service's Customs Electronic Bulletin Board- The U.S. Customs Service maintains a free Customs Electronic Bulletin Board geared especially toward Customs House Brokers. OFAC's information is available as a date-specific self-extracting DOS file ("OFAC*.EXE" in File Area #15, "Customs Extra!"). Modem access is at 703/440-6155 with voice system support at 703/440-6236.

QUESTIONS-THE OFAC COMPLIANCE HOTLINE:

If you have any questions regarding OFAC-administered sanctions programs, call OFAC's Compliance Hotline at 1-800-540-6322 [(202) 622-2490] on weekdays from 7:30 a.m. to 7:00 p.m. eastern time. OFAC also has a Miami branch office with a special bi-lingual hotline relating to information on the Cuban embargo which can be reached by telephone at (305) 810-5170.

NOTE: *This overview is meant to alert mariners to potential issues arising under U.S. sanctions and does not have the force of law. Reference should be made to the controlling legal authorities to determine the applicability of specific prohibitions, exceptions, and licensing provisions. The regulations governing OFAC sanctions programs are found in chapter V of title 31, Code of Federal Regulations. Prior to the issuance of regulations, a new OFAC sanctions program is governed by the relevant Presidential Executive order imposing sanctions and delegating implementation authority to the Secretary of the Treasury.*
(Repetition NTM 1(63)03) (DEPT. OF TREASURY)

(64) MARITIME INDUSTRY REPORTING OF A SUSPECTED OR ACTUAL TERRORIST INCIDENT

In addition to oil and hazardous substance releases, the National Response Center (NRC) must be notified of any suspected or actual terrorist incident (e.g., chemical, radiological, biological, or etiological discharge into the environment) anywhere in the United States and its territories, particularly one affecting transportation systems. Coast Guard units that receive reports of suspected or actual incidents should ensure such reports are reported to the NRC at 800-424-8802 or (202) 267-2675. Individuals are encouraged to visit the NRC website (http://www.nrc.uscg.mil) for reporting requirements and other helpful information.
(Repetition NTM 1(64)03) (USCG)

(65) ELECTRONIC VESSEL NOTICE OF ARRIVAL (NOA) SUBMISSION.

The National Vessel Movement Center (NVMC) has developed two new methods for electronic submission of Notice of Arrival information, commonly referred to as the e-NOA. One method uses an Extensible Markup Language (XML) schema, and the other uses a web interface. The web interface can be accessed via a link on the NVMC website: http://www.nvmc.uscg.gov. More information can be obtained about the XML schema by contacting the NVMC point of contact (POC) listed below. Although use of the e-NOA is optional, all maritime stakeholders (e.g., vessel agents, masters, owners, and operators) are strongly encouraged to take advantage of these new submission methods. The e-NOA represents the next phase in making the NOA submissions more efficient.

The e-NOA aids the U.S. Coast Guard in reviewing and processing of NOA information by: speeding input of NOA data into the U.S. Coast Guard's Ship Arrival Notification System (SANS); ensuring that the information is in an easy-to-read format; and facilitating the process of sharing of data with other federal agencies. It reduces the burden on industry by: offering an easy-to-use submission method; allowing for previous e-NOA entries to be copied and used again for future submissions; and providing submitters with an electronic receipt acknowledging the submission has been received by the NVMC.

An accurate and complete e-NOA satisfies the requirements of the NOA regulations in 33 CFR 160, subpart C. Therefore, the maritime industry will not be required to make duplicate submissions of NOA information to the U.S. Coast Guard.

The maritime industry may find e-NOA technical details (that is, creating e-NOA accounts, issues concerning connectivity, use of browsers, etc.) on the web by visiting the address listed above.

The U.S. Coast Guard is interested in receiving the maritime industry's feedback about the usability of the e-NOA. If members of the industry have comments or suggestions, they may send them via e-mail to sans@nvmc.uscg.gov.

The NVMC POC for the e-NOA is LT Tom Philbrick, who may be reached at (304) 264-2678. The U.S. Coast Guard Headquarters POC for all other NOA issues is LTJG Kim Andersen, who may be reached at (202) 267-2562.

(USCG)

411 49Ed. 3/03 LAST NM 52/03 1/04
Add Dashed-line circle "Fish haven (cov 14fms)" 27°59′N 91°55′W
(40/03 CG8)

503 (INT 811) 4Ed. 7/27/96 LAST NM 12/00 1/04
Add Legend "Reported Extinguished" to light 7°28′N 82°14′W
(NTM0003/2003)

1115A Ed. 10/02 LAST NM 52/03 1/04
Add Platform [L10] 29°47.1′N 87°49.9′W
(40/03 CG8)

1116A Ed. 6/03 LAST NM 52/03 1/04
Delete Platform 28°28.0′N 93°10.4′W

Add Dashed-line circle "Fish haven (cov 14fms)"
marked by buoy Y (Priv) (PA) 28°19.8′N 93°47.9′W
Note: Platform remains

Dashed-line circle "Fish haven (cov 14fms)"
marked by buoy Y (Priv) (PA) 27°58.8′N 91°55.1′W
Note: Platform remains
(40/03 CG8)

11004 7Ed. 10/29/94 LAST NM 51/03 1/04
Add Depth 25.5 meters with legend "Fish haven"
enclosed by dashed-line circle 28°19.8′N 93°47.9′W

Depth 25.5 meters with legend "Fish haven"
enclosed by dashed-line circle 27°58.8′N 91°55.1′W
Note: Platform remains
(40/03 CG8)

★**11301** 23Ed. 9/8/01 LAST NM 32/03 1/04
Add Tabulation of controlling depths from
Subsection I-3
(NOS)

11302 30Ed. 9/03 LAST NM 48/03 1/04
(Side B)
Add Tabulation of controlling depths from
Subsection I-3
(NOS)

11305 1Ed. 10/2/99 LAST NM N32/03 N1/04
Add Tabulation of controlling depths from
Subsection I-3
(NOS)

★**11307** 36Ed. 9/22/01 LAST NM 52/03 1/04
Delete Platform 27°30′15″N 97°01′20″W
(Supersedes 35/03-11307)
(40/03 CG8)

★**11309** 37Ed. 9/03 LAST NM 50/03 1/04
Add Tabulation of controlling depths from
Subsection I-3
(NOS)

11310 1Ed. 9/25/99 LAST NM N32/03 N1/04
Add Tabulation of controlling depths from
Subsection I-3
(NOS)

★**11311** 23Ed. 1/26/02 LAST NM 26/03 1/04
Add Tabulation of controlling depths from
Subsection I-3
(NOS)

★**11312** 3Ed. 10/20/01 LAST NM 32/03 1/04
Add Tabulation of controlling depths from
Subsection I-3
(NOS)

11316 39Ed. 3/03 LAST NM 34/03 1/04
Add Tabulation of controlling depths from
Subsection I-3
(NOS)

★**11317** 29Ed. 2/16/02 LAST NM 34/03 1/04
Add Tabulation of controlling depths from
Subsection I-3
(NOS)

11318 1Ed. 10/2/99 LAST NM N50/03 N1/04
Add Tabulation of controlling depths from
Subsection I-3
(NOS)

★**11322** 28Ed. 3/03 LAST NM 47/03 1/04
(Side B)
Add Tabulation of controlling depths from
Subsection I-3
(NOS)

★**11323** 60Ed. 9/03 LAST NM 51/03 1/04
Change Legend to "35 FT AUG 2003" 29°20′55″N 94°43′41″W

Add Platform [L10] 29°25′51″N 94°12′40″W
(NOS; 40/03 CG8)

★**11324** 33Ed. 9/03 LAST NM 52/03 1/04
Change Legend to "35 FT AUG 2003" 29°21′00″N 94°43′43″W

Add Tabulation of controlling depths from
Subsection I-3
(NOS)

★**11325** 35Ed. 5/03 LAST NM 47/03 1/04
Add Tabulation of controlling depths from
Subsection I-3
(NOS)

11326 31Ed. 10/02 LAST NM 52/03 1/04
(Page A)
Change Legend to "40 FT 2003" 29°36′55″N 94°57′32″W

Legend to "BAYPORT SHIP CHANNEL 40
FT FOR WIDTH OF 300 FT SEP 2003"
29°36′57″N 95°00′40″W

Legend to "39 FT SEP 2003" 29°36′29″N 95°01′40″W
(See 16, 33, 52/03-11326)

(Page C)
Change Legend to "35 FT AUG 2003" 29°21′02″N 94°43′50″W
(NOS)

★**11327** 31Ed. 8/03 LAST NM 52/03 1/04
Change Legend to "40 FT SEP 2003" 29°36′54.0″N 94°57′31.0″W

Legend to "40 FT FOR WIDTH OF 300 FT
SEP 2003" 29°36′50.5″N 94°58′45.3″W

Legend to "39 FT SEP 2003" 29°36′41.0″N 95°01′17.0″W
(Supersedes 52/03-11327)

Add Tabulation of controlling depths from
Subsection I-3
(NOS)

★**11328** 23Ed. 8/03 LAST NM 52/03 1/04
Add Tabulation of controlling depths from
Subsection I-3
(NOS)

★**11330** 15Ed. 10/03 LAST NM 51/03 1/04
Delete Platform 28°28.0′N 93°10.4′W

Add Dashed-line circle "Fish haven (cov 14fms)"
marked by buoy Y (Priv) (PA) 28°19.8′N 93°47.9′W
(40/03 CG8)

★**11332** 28Ed. 8/02 LAST NM 52/03 1/04
Add Submarine pipeline [L40.1] between
29°35′50″N 93°46′22″W
29°35′42″N 93°46′40″W

Platform [L10] 29°25′51″N 94°12′40″W

Tabulation of controlling depths from Subsection I-3
(NOS; 40/03 CG8)

★**11340** 68Ed. 6/03 LAST NM 52/03 1/04
Delete Platform 28°28.0′N 93°10.4′W

Add Dashed-line circle "Fish haven (cov 14fms)" marked by buoy Y (Priv) (PA) 28°19.8′N 93°47.9′W
Note: Platform remains

Dashed-line circle "Fish haven (cov 14fms)" marked by buoy Y (Priv) (PA) 27°58.8′N 91°55.1′W
Note: Platform remains
(40/03 CG8)

★**11341** 39Ed. 2/03 LAST NM 52/03 1/04
Add Submarine pipeline [L40.1] between
29°35′50″N 93°46′22″W
29°35′42″N 93°46′40″W

Platform [L10] 29°32′09″N 93°32′45″W

Tabulation of controlling depths from Subsection I-3
(NOS; 40/03 CG8)

★**11342** 52Ed. 5/03 LAST NM 47/03 1/04
Add Tabulation of controlling depths from Subsection I-3
(NOS)

★**11351** 38Ed. 3/03 LAST NM 52/03 1/04
Change Legend to "14 FT BY 400 FT SEP-NOV 2003"
29°23′48″N 91°21′51″W
Legend to "14 FT BY 400 FT SEP-NOV 2003"
29°18′28″N 91°26′14″W
(Supersedes 48/03-11351)
(NOS)

11352 36Ed. 11/02 LAST NM 51/03 1/04
Change Legend to "14 FT BY 400 FT SEP-NOV 2003" between 29°23.2′N 91°22.0′W
29°25.4′N 91°20.0′W

Legend to "14 FT BY 400 FT SEP-NOV 2003"
29°16.2′N 91°28.7′W
(Supersedes 48/03-11352)
(NOS)

11353 2Ed. 3/16/02 LAST NM 45/03 1/04
Change Legend to "MISSISSIPPI RIVER-GULF OUTLET (see tabulation) Regulation 162.75 (see note A)" 29°26′22″N 88°59′43″W
Legend to "MISSISSIPPI RIVER-GULF OUTLET (see tabulation) Regulation 162.75 (see note A)" 29°33′06″N 89°11′20″W

Add Tabulation of controlling depths from Subsection I-3
(NOS)

11354 24Ed. 4/03 LAST NM 51/03 1/04
(Side A)
Change Legend to "14 FT BY 400 FT SEP-NOV 2003"
29°23′38″N 91°22′00″W
Legend to "14 FT BY 400 FT SEP-NOV 2003"
29°18′26″N 91°26′15″W
(Supersedes 48/03-11354)
(NOS)

★**11360** 40Ed. 10/02 LAST NM 52/03 1/04
Add Platform [L10] 29°47.1′N 87°49.9′W
(40/03 CG8)

★**11361** 70Ed. 4/03 LAST NM 52/03 1/04
Delete Danger circle "Obstn" (PA) 28°56′18″N 89°24′22″W
Position circle "Piling rep" (PA) 28°53′17″N 89°26′00″W

Substitute Depth 24 feet for 23 feet Obstn "Rep (2003)" (PA) 28°53′29″N 89°26′10″W

Depth 36 feet for 38 feet 28°53′10″N 89°26′05″W

Depth 32 feet for 31 feet Obstn "Rep (2003)" (PA) 28°53′04″N 89°26′10″W

Depth 96 feet for 102 feet (See 24/03-11361) 28°52′07″N 89°25′50″W

Add Depth 66 feet 28°52′36″N 89°25′40″W

(Inset Southwest Pass)
Delete Position circle "Subm piling rep" (PA)
28°53′18.0″N 89°26′00.0″W

Substitute Depth 24 feet for 23 feet Obstn "Rep (2003)" (PA) 28°53′28.5″N 89°26′09.9″W

Depth 36 feet for 38 feet 28°53′09.9″N 89°26′05.0″W

Depth 32 feet for 31 feet Obstn "Rep (2003)" (PA) 28°53′03.5″N 89°26′09.7″W

Depth 66 feet for 70 feet 28°52′36.1″N 89°25′39.9″W
(NOS)

11362 4Ed. 6/10/00 LAST NM N52/03 N1/04
Add Platform [L10] 29°47.1′N 87°49.9′W
(40/03 CG8)

★**11363** 39Ed. 9/03 LAST NM 51/03 1/04
Delete Stranded wreck (PA) 29°45′36″N 88°47′00″W
(See 51/03-11363)

Change Legend to "MISSISSIPPI RIVER-GULF OUTLET (see tabulation) Regulation 162.75 (see note A)" 29°27′12″N 89°00′56″W
Legend to "MISSISSIPPI RIVER-GULF OUTLET (see tabulation) Regulation 162.75 (see note A)" 29°34′20″N 89°11′48″W

Add Tabulation of controlling depths from Subsection I-3
(NOS; 40/03 CG8)

11364 39Ed. 11/02 LAST NM 51/03 1/04
Add Tabulation of controlling depths from Subsection I-3
(NOS)

11366 8Ed. 10/03 LAST NM 52/03 1/04
Delete Position circle "Subm piling rep" (PA)
28°53.3′N 89°26.0′W

Stranded wreck (PA) 29°45.6′N 88°47.0′W
(See 52/03-11366)

Substitute Depth 4 fathoms for 3 fathoms 5 feet Obstn "Rep (2003)" (PA) 28°53.5′N 89°26.2′W
Depth 5 fathoms 2 feet for 5 fathoms 1 foot Obstn "Rep (2003)" (PA) 28°53.1′N 89°26.2′W
(NOS; 40/03 CG8)

11369 44Ed. 12/02 LAST NM 50/03 1/04
Add Tabulation of controlling depths from Subsection I-3
(NOS)

11373 43Ed. 9/03 LAST NM 49/03 1/04
Delete Range lights (2) and range line between
30°20′04″N 88°33′44″W
30°20′37″N 88°34′01″W

Buoy "51" 30°20′35″N 88°34′02″W
Light "A" 30°20′28″N 88°34′12″W

(continued on next page)

11373 (Continued)
Change Characteristic of light "49" to Fl G 4s
30°20′20″N 88°33′55″W
Characteristic of light "50" to Fl R 4s
30°20′24″N 88°33′49″W

Add Buoy "51" G, QG 30°20′32″N 88°34′05″W
(40/03 CG8)

11374 31Ed. 8/02 LAST NM 51/03 1/04
(Side B)
Delete Range lights (2) and range line between
30°20′04.1″N 88°33′43.5″W
30°20′36.8″N 88°34′00.9″W

Buoy "51" 30°20′34.7″N 88°34′02.8″W
Buoy "1A" 30°20′36.0″N 88°34′10.1″W
Buoy "1" 30°20′33.4″N 88°34′26.0″W
Light "A" 30°20′28.3″N 88°34′12.1″W

Change Characteristic of light "49" to Fl G 4s
30°20′19.8″N 88°33′55.4″W
Characteristic of light "50" to Fl R 4s
30°20′24.3″N 88°33′49.8″W

Add Buoy "51" G, QG 30°20′31.7″N 88°34′05.3″W
Buoy "1" G, can 30°20′31.6″N 88°34′25.5″W
(40/03 CG8)

★**11375** 35Ed. 8/02 LAST NM 51/03 1/04
Delete Range lights (2), range line and legend
"RANGE "E"" between 30°20′04.1″N 88°33′43.5″W
30°20′36.8″N 88°34′00.9″W

Buoy "51" 30°20′34.7″N 88°34′02.8″W
Buoy "1A" 30°20′36.0″N 88°34′10.1″W
Buoy "1" 30°20′33.4″N 88°34′26.0″W
Light "A" 30°20′28.3″N 88°34′12.1″W

Change Characteristic of light "49" to Fl G 4s
30°20′19.8″N 88°33′55.4″W
Characteristic of light "50" to Fl R 4s
30°20′23.9″N 88°33′49.8″W

Add Buoy "51" G, QG 30°20′31.7″N 88°34′05.3″W
Buoy "1" G, can 30°20′31.6″N 88°34′25.5″W
(40/03 CG8)

11520 41Ed. 7/03 LAST NM 50/03 1/04
Delete Buoy "WR13" 34°33.1′N 76°53.5′W
(43/03 CG5)

11525 6Ed. 9/23/00 LAST NM N50/03 N1/04
Delete Buoy "WR13" 34°33.0′N 76°53.5′W

Relocate Buoy "12" from 35°09.1′N 75°17.3′W to
35°09.1′N 75°17.6′W
(See N24/03-11525)
(43/03 CG5)

★**11543** 22Ed. 7/7/01 LAST NM 38/03 1/04
Delete Buoy "WR13" 34°32′50″N 76°53′42″W
(43/03 CG5)

11545 60Ed. 9/02 LAST NM 49/03 1/04
Add Tabulation of controlling depths from
Subsection I-3
(NOS)

★**11547** 35Ed. 3/30/02 LAST NM 49/03 1/04
Add Tabulation of controlling depths from
Subsection I-3
(NOS)

11555 38Ed. 7/1/02 LAST NM 50/03 1/04
Relocate Buoy "12" from 35°09′05″N 75°17′20″W to
35°09′05″N 75°17′33″W
(See 24/03-11555)
(43/03 CG5)

12201 25Ed. 7/17/99 LAST NM N32/03 N1/04
Relocate Buoy "12" from 35°09.1′N 75°17.3′W to
35°09.1′N 75°17.6′W
(See N24/03-12201)
(43/03 CG5)

★**12281** 49Ed. 5/13/00 LAST NM 49/03 1/04
Delete Danger circle "Pipe" (PA) 39°15′18″N 76°33′30″W
(Supersedes 49/03-12281)
(43/03 CG5)

★**12311** 42Ed. 8/03 LAST NM 51/03 1/04
Add Tabulation of controlling depths from
Subsection I-3
(NOS)

12312 52Ed. 1/03 LAST NM 51/03 1/04
Add Tabulation of controlling depths from
Subsection I-3
(NOS)

13229 27Ed. 7/28/01 LAST NM 52/03 1/04
(Page G)
Add Buoy "1" G, GONG 41°39′00″N 70°42′44″W
(See 50/03-13229)
(NTM0002/2003)

13230 46Ed. 11/02 LAST NM 52/03 1/04
Add Buoy "1" G, GONG 41°39′00″N 70°42′47″W
(See 50/03-13230)
(NTM0002/2003)

★**13236** 29Ed. 11/6/99 LAST NM 50/03 1/04
Add Buoy "1" G, GONG 41°39′00.0″N 70°42′45.2″W
(See 50/03-13236)
(NTM0002/2003)

14014 82Ed. 12/24/94 LAST NM 45/01 1/04
Add Depth 10.5 meters wreck [K26] 43°56.1′N 60°07.5′W
(3(4098)02 Ottawa)

14044 44Ed. 12/24/94 LAST NM 49/03 1/04
Delete Purple dashed line between 45°11′52.0″N 66°05′50.9″W
45°11′52.0″N 66°04′16.5″W

Add Purple dashed line between 45°11′52.0″N 66°05′50.9″W
45°11′23.0″N 66°04′34.8″W
(See 49/03-14044)
(2(4116)02 Ottawa)

14062 17Ed. 5/20/95 LAST NM 36/03 1/04
Add Superbuoy ODAS [Q58] Y, Fl(5) Y 20s
43°37.5′N 66°33.2′W
(3(4230)02 Ottawa)

14110 42Ed. 12/31/94 LAST NM 44/03 1/04
Change Light to Fl R 4s 25ft 7M 45°30′13″N 61°03′20″W
(1(4308)03 Ottawa)

14112 5Ed. 2/11/95 LAST NM 44/03 1/04
Change Light to Fl R 4s 25ft 7M 45°30′13″N 61°03′20″W
(1(4308)03 Ottawa)

14136 2Ed. 2/4/95 LAST NM 36/96 1/04
Delete Buoy "S6" 46°12′32.2″N 60°13′54.5″W

Add Buoy "S6" R, pillar, Fl R 4s BELL
46°12′28.5″N 60°14′01.3″W

(Plan A)
Delete Buoy "S6" 46°12′32.2″N 60°13′54.5″W

Add Buoy "S6" R, pillar, Fl R 4s BELL
46°12′28.5″N 60°14′01.3″W
(1(4266)03 Ottawa)

14151 2Ed. 6/3/95 LAST NM 38/03 1/04
Add Buoy "NJA" BYB, double cone topmark bases together 46°11′09″N 62°23′10″W
(1(4403)03 Ottawa)

14329 5Ed. 1/14/95 LAST NM 49/03 1/04
Add Light Fl 4s 188ft 7M 47°35.03′N 57°36.93′W
(1(4634)03 Ottawa)

14340 25Ed. 11/4/95 LAST NM 49/03 1/04
Add Wreck [K29] 47°34.9′N 54°56.2′W
(3(4831)02 Ottawa)

14358 Ed. 10/2/87 LAST NM N47/03 N1/04
Change Light to QR 47°06.16′N 55°44.88′W

(Plan Grand Bank Harbour)
Change Light to QR 47°06′09.4″N 55°44′53.2″W
(1(4832)03 Ottawa)

14373 2Ed. 3/4/95 LAST NM 49/03 1/04
Change Buoy "CB" to Y, spar, Fl Y 4s 47°31′28″N 52°58′22″W
Buoy "CBB" to Y, spar, Fl Y 4s 47°31′34″N 52°58′30″W
(3(4848)02 Ottawa)

★**14864** 26Ed. 8/11/01 LAST NM 37/02 1/04
(Inset)
Change Legend to "24 FT MAY 2002" 45°03′28.2″N 83°24′15.0″W

Add Depth 18 feet 45°03′52.1″N 83°24′23.8″W
(NOS)

★**14904** 26Ed. 8/03 LAST NM 40/03 1/04
(Inset Kenosha Harbor)
Relocate Light from 42°35′17.4″N 87°48′27.5″W to 42°35′17.2″N 87°48′26.9″W
(32/03 CG9)

14916 10Ed. 7/02 LAST NM 17/03 1/04
(Page 33)
Change Legend to "21 FT FOR MID-WIDTH OF 110 FT MAY 2002" 44°30′28″N 88°01′18″W
Legend to "21 FT FOR MID-WIDTH OF 110 FT MAY 2002" 44°29′55″N 88°01′25″W

Legend to "14 FT SEP 2002" 44°29′36″N 88°01′33″W
Legend to "18½ FT SEP 2002" 44°29′32″N 88°01′32″W

(Page 34)
Change Legend to "22½ FT FOR MID-WIDTH OF 150 FT OCT 2002" 44°32′37″N 88°00′09″W
Legend to "21 FEET FOR MID-WIDTH OF 110 FEET MAY 2002" 44°31′35″N 88°00′35″W

Legend to "13½ FEET JUN 2002" 44°31′17″N 88°00′36″W
(NOS)

★**14918** 26Ed. 2/28/98 LAST NM 17/03 1/04
Change Legend to "24½ FT FOR MID-WIDTH OF 150 FT SEP 2002" 44°35′07″N 87°58′19″W
Legend to "25 FT FOR MID-WIDTH OF 150 FT OCT 2002" 44°33′56″N 87°59′27″W
Legend to "22½ FT FOR MID-WIDTH OF 150 FT OCT 2002" 44°32′54″N 88°00′01″W
Legend to "21 FEET FOR MID-WIDTH OF 110 FEET MAY 2002" 44°31′31″N 88°00′37″W
Legend to "21 FT FOR MID-WIDTH OF 110 FEET MAY 2002" 44°30′08″N 88°01′25″W

Legend to "13½ FT" 44°31′17″N 88°00′35″W
Legend to "14 FT SEP 2002" 44°29′35″N 88°01′33″W
Legend to "18½ FT SEP 2002" 44°29′33″N 88°01′30″W

(Inset)
Change Legend to "21 FEET FOR MID-WIDTH OF 110 FEET MAY 2002" 44°31′17″N 88°00′41″W
Legend to "13½ FT JUN 2002 TURNING BASIN" 44°31′17″N 88°00′35″W
Legend to "21 FEET FOR MID-WIDTH OF 110 FEET MAY 2002" 44°30′35″N 88°01′16″W
(NOS)

★**14919** 27Ed. 9/20/97 LAST NM 24/02 1/04
Change Legend to "16 FEET MAY 2003" 44°47′32″N 87°18′39″W

(Inset)
Change Legend to "18 FT MAY 2003" 44°49′46″N 87°22′47″W
(NOS)

★**14930** 24Ed. 11/8/97 LAST NM 45/02 1/04
Change Legend to "21½ FT JUN 2003" 42°06′58.3″N 86°29′46.5″W

Legend to "14 FT FOR MIDDLE WIDTH OF 150 FT APR 2003" 42°06′46.3″N 86°29′07.2″W

Legend to "10 FT APR 2003" 42°06′48.3″N 86°28′27.4″W

Legend to "12½ FT APR 2003" 42°06′47.7″N 86°28′18.5″W

Legend to "6½ FT APR 2003" 42°06′44.8″N 86°28′19.8″W
Legend to "11 FT APR 2003" 42°06′54.7″N 86°28′05.0″W

Add Depth 12 feet 42°06′50.1″N 86°28′02.5″W
(NOS)

★**14932** 23Ed. 4/03 LAST NM 26/03 1/04
Delete Buoy "2" 42°46′52.1″N 86°10′55.9″W

Change Buoy "1" to G, Fl G 6s 42°46′51.8″N 86°11′02.2″W

Add Buoy "2" R, Fl R 6s 42°46′52.5″N 86°10′57.4″W
(24/03 CG9)

★**14933** 24Ed. 5/02 LAST NM 37/02 1/04
Substitute Depth 4 feet for 7 feet 43°04′00.5″N 86°14′10.9″W
Depth 3 feet for 11 feet 43°03′59.4″N 86°14′11.5″W

Change Legend to "21 FT MAY 2003" 43°03′28″N 86°15′24″W

Legend to "15 FT FOR MID-WIDTH OF 150 FT MAY 2003" 43°03′37″N 86°14′33″W
Legend to "13 FT FOR MID-WIDTH OF 150 FT MAY 2003" 43°04′40″N 86°13′41″W

Legend to "9 FEET 2003" 43°04′34″N 86°13′21″W

Add Depth 16 feet 43°04′36.5″N 86°13′25.4″W
Depth 17 feet 43°04′38.2″N 86°13′20.3″W
(NOS)

★**14934** 27Ed. 2/03 LAST NM 26/03 1/04
Delete Depth 23 feet 43°13′41.2″N 86°20′22.8″W

Change Legend to "24 FT AUG 2003" 43°13′29.5″N 86°20′50.5″W

Legend to "27½ FT AUG 2003" 43°13′35.2″N 86°20′36.0″W

Legend to "24 FT AUG 2003" 43°13′45.0″N 86°20′12.2″W

Add Depth 21 feet 43°13′25.6″N 86°20′51.3″W
(NOS)

★**14935** 21Ed. 6/28/97 LAST NM 17/02 1/04
Change Legend to "9 FT AUG 2003" 43°22′30.5″N 86°25′51.0″W

Legend to "9 FT FOR WIDTH OF 80 FT AUG 2003" 43°22′31.0″N 86°25′36.0″W
(NOS)

★**14938** 23Ed. 9/13/97 LAST NM 43/01 1/04
Change Legend to "22 FEET AUG 2000-APR 2003" 44°15′05.8″N 86°20′54.4″W
Legend to "18 FEET AUG 2000-JUL 2002" 44°14′51.6″N 86°19′55.0″W

Add Depth 12 feet 44°14′53.6″N 86°19′26.5″W
Depth 13 feet 44°14′53.4″N 86°19′30.6″W
(NOS)

★14942 25Ed. 3/22/97 LAST NM 35/02 1/04
Relocate Light "2" from 45°12′36.2″N 85°01′21.2″W to 45°12′39.0″N 85°01′19.3″W and change height to 10ft

(Inset)
Substitute Depth 15 feet for 14 feet 45°18′55.3″N 85°14′43.5″W
(See 10/99, 22/00, 35/02-14942)

Add Depth 16 feet 45°18′55.9″N 85°14′49.2″W
(NOS; 27/03 CG9)

★14970 25Ed. 3/19/94 LAST NM 51/02 1/04
Change Legend to "23½ FT MAY 2003" 46°34′34″N 87°23′07″W
(NOS)

★14972 25Ed. 11/16/96 LAST NM 21/02 1/04
Change Legend to "24 FT OCT 2002" 47°14′12″N 88°38′00″W
Legend to "21 FT OCT 2002" 47°13′53″N 88°37′44″W
Legend to "20 FT OCT 2002" 47°13′44″N 88°37′40″W
Legend to "21 FT 2002" 47°13′29″N 88°37′30″W
Legend to "24 FT 2002" 47°13′10″N 88°37′16″W
Legend to "22 FT OCT 2002" 47°12′46″N 88°37′09″W
(NOS)

15044 3Ed. 12/14/96 LAST NM 47/03 1/04
Delete Buoy "NK3" 53°07′33″N 55°45′46″W
Buoy "NPP" 53°11′36″N 55°41′36″W

Add Buoy "NPP" YB, pillar, double cone topmark points downward, Q(6) + L Fl 15s 53°11′35″N 55°41′36″W

Light Fl R 4s to buoy "NL2" 52°43′02″N 55°49′20″W
Buoy "ND4" R, spar, Fl R 4s 53°04′47″N 55°52′15″W
Buoy "ND3" G, spar, Fl G 4s 53°04′44″N 55°52′12″W

Buoy "NKF" BY, pillar, double cone topmark points upward, Q 53°07′32″N 55°45′50″W
(3(4702)02 Ottawa)

16006 33Ed. 12/23/00 LAST NM 36/03 1/04
Add Note
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Tuklung Mt, AK WNG-525 162.425 MHz"
65°28.0′N 165°00.0′W

Position circle [B33] "R Tr" 58°51.5′N 159°28.0′W
(NOS)

16011 35Ed. 12/2/00 LAST NM 50/03 1/04
Add Note
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Tuklung Mt, AK WNG-525 162.425 MHz"
58°48.0′N 170°00.0′W

Position circle [B33] "R Tr" 58°51.5′N 159°28.0′W
(NOS)

16067 7Ed. 7/5/97 LAST NM 52/01 1/04
Add Note
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Barrow, AK KZZ-53 162.550 MHz"
71°13′46″N 154°45′21″W
(NOS)

16081 6Ed. 12/29/90 LAST NM 52/01 1/04
Add Note
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Barrow, AK KZZ-53 162.550 MHz"
71°23′00″N 154°51′05″W
(NOS)

16082 6Ed. 7/28/90 LAST NM 52/01 1/04
Add Note
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Barrow, AK KZZ-53 162.550 MHz"
71°25′45″N 157°03′40″W
(NOS)

16083 5Ed. 9/30/89 LAST NM 34/95 1/04
Add Note
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Barrow, AK KZZ-53 162.550 MHz"
71°09′00″N 158°02′01″W
(NOS)

16305 9Ed. 3/27/93 LAST NM 8/03 1/04
Add Note
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Tuklung Mt, AK WNG-525 162.425 MHz"
58°39′52″N 161°47′15″W
(NOS)

★16315 10Ed. 7/29/00 LAST NM 42/00 1/04
Change Note to
"NOTE D
The land areas and adjacent waters within 3 nautical miles of Round Island, Crooked Island, High Island, Summit Island, The Twins and Black Rock are within the Walrus Islands State Game Sanctuary. Access to Round Island and waters within 3 nautical miles of Round Island is prohibited without a permit from the Alaska Department of Fish and Game, Division of Wildlife Conservation in Dillingham or Anchorage." 58°48′21″N 159°19′58″W

(continued on next page)

16315 (Continued)
Add Note
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Tuklung Mt, AK WNG-525 162.425 MHz"
58°57′28″N 160°03′25″W

Position circle [B33] "R Tr" 58°51′27″N 159°27′57″W
(NOS)

16322 7Ed. 7/4/92 LAST NM 46/03 1/04
Add Note
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Tuklung Mt, AK WNG-525 162.425 MHz"
58°59′08″N 158°14′48″W
(NOS)

16338 3Ed. 2/8/92 LAST NM 43/01 1/04
Add Note
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Tuklung Mt, AK WNG-525 162.425 MHz"
57°38′02″N 157°28′40″W
(NOS)

16343 7Ed. 8/28/93 LAST NM 48/93 1/04
Add Note
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Tuklung Mt, AK WNG-525 162.425 MHz"
56°48′58″N 158°50′28″W
(NOS)

16575 1Ed. 4/15/89 LAST NM 39/02 1/04
Change Note to
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Raspberry I, AK KZZ-90 162.425 MHz
Kodiak, AK WXJ-78 162.55 MHz
Homer, AK WXJ-24 162.40 MHz"
57°55′49″N 155°11′16″W
(NOS)

16580 11Ed. 8/18/01 LAST NM 39/02 1/04
Change Note to
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Raspberry I, AK KZZ-90 162.425 MHz
Bede Mt, AK WNG-528 162.450 MHz
Pillar Mt, AK WNG-531 162.525 MHz
Kodiak, AK WXJ-78 162.55 MHz" 57°18.0′N 155°20.0′W

Add Position circle [B33] "R Tr" 58°04.0′N 153°22.6′W
(NOS)

16590 10Ed. 7/02 LAST NM 38/02 1/04
Add Note
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Raspberry I, AK KZZ-90 162.425 MHz
Pillar Mt, AK WNG-531 162.525 MHz"
56°34′30″N 154°29′49″W
(NOS)

16591 8Ed. 5/2/92 LAST NM 27/92 1/04
Add Note
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Raspberry I, AK KZZ-90 162.425 MHz"
56°58′22″N 154°13′19″W
(NOS)

16592 9Ed. 9/1/90 LAST NM 16/03 1/04
Change Note to
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Raspberry I, AK KZZ-90 162.425 MHz
Pillar Mt, AK WNG-531 162.525 MHz
Kodiak, AK WXJ-78 162.55 MHz"
57°07′47″N 153°35′54″W
(NOS)

16593 11Ed. 2/03 LAST NM 14/03 1/04
Change Note to
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Raspberry I, AK KZZ-90 162.425 MHz
Bede Mt, AK WNG-528 162.450 MHz
Pillar Mt, AK WNG-531 162.525 MHz
Kodiak, AK WXJ-78 162.55 MHz"
57°25′12″N 152°54′29″W
(NOS)

★**16594** 13Ed. 4/4/98 LAST NM 2/03 1/04
Change Note to
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Raspberry I, AK KZZ-90 162.425 MHz
Bede Mt, AK WNG-528 162.450 MHz
Pillar Mt, AK WNG-531 162.525 MHz
Kodiak, AK WXJ-78 162.55 MHz"
57°42′24″N 152°47′17″W

Add Position circle [B33] "R Tr" 57°47′15″N 152°26′30″W
Position circle [B33] "R Tr" 58°03′59″N 153°22′37″W
(NOS)

16595 14Ed. 5/5/01 LAST NM 2/03 1/04
Change Note to
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Raspberry I, AK KZZ-90 162.425 MHz
Bede Mt, AK WNG-528 162.450 MHz
Pillar Mt, AK WNG-531 162.525 MHz
Kodiak, AK WXJ-78 162.55 MHz"
57°49′48.0″N 152°27′12.0″W

Add Position circle [B33] "R Tr" 57°47′15.0″N 152°26′30.0″W
(NOS)

16596 12Ed. 7/02 LAST NM 39/02 1/04
Change Note to
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Raspberry I, AK KZZ-90 162.425 MHz
Bede Mt, AK WNG-528 162.450 MHz
Pillar Mt, AK WNG-531 162.525 MHz
Kodiak, AK WXJ-78 162.55 MHz"
57°43′35.0″N 152°33′49.0″W
(NOS)

16597 8Ed. 10/7/89 LAST NM 43/02 1/04
Change Note to
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Raspberry I, AK KZZ-90 162.425 MHz
Pillar Mt, AK WNG-531 162.525 MHz
Kodiak, AK WXJ-78 162.55 MHz"
57°23′30″N 153°32′51″W
(NOS)

16598 9Ed. 7/29/00 LAST NM 43/02 1/04
Add Note
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Raspberry I, AK KZZ-90 162.425 MHz
Pillar Mt, AK WNG-531 162.525 MHz"
57°19′13″N 153°56′23″W
(NOS)

16599 6Ed. 5/5/90 LAST NM 43/02 1/04
(Inset Larsen Bay)
Add Note
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Raspberry I, AK KZZ-90 162.425 MHz
Pillar Mt, AK WNG-531 162.525 MHz"
57°33′35.0″N 154°03′25.0″W
(NOS)

16601 10Ed. 1/22/00 LAST NM 19/00 1/04
Add Note
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio station listed below provides continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Raspberry I, AK KZZ-90 162.425 MHz"
57°06′23″N 154°26′31″W
(NOS)

16604 11Ed. 3/16/02 LAST NM 22/02 1/04
Change Note to
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Raspberry I, AK KZZ-90 162.425 MHz
Bede Mt, AK WNG-528 162.450 MHz
Pillar Mt, AK WNG-531 162.525 MHz
Kodiak, AK WXJ-78 162.55 MHz"
58°12′26″N 152°43′29″W
(NOS)

16605 8Ed. 9/2/89 LAST NM 47/89 1/04
Change Note to
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Raspberry I, AK KZZ-90 162.425 MHz
Bede Mt, AK WNG-528 162.450 MHz
Pillar Mt, AK WNG-531 162.525 MHz
Kodiak, AK WXJ-78 162.55 MHz"
58°30′26.0″N 152°30′12.0″W
(NOS)

16606 11Ed. 6/02 LAST NM 21/03 1/04
Change Note in right upper margin of chart to
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Raspberry I, AK KZZ-90 162.425 MHz
Bede Mt, AK WNG-528 162.450 MHz
Pillar Mt, AK WNG-531 162.525 MHz
Homer, AK WXJ-24 162.40 MHz"
(NOS)

16640 24Ed. 9/15/01 LAST NM 21/03 1/04
Change Note to
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Raspberry I, AK KZZ-90 162.425 MHz
Bede Mt, AK WNG-528 162.450 MHz
Pillar Mt, AK WNG-531 162.525 MHz
Rugged I, AK WNG-526 162.425 MHz
Ninilchik, AK KZZ-97 162.550 MHz
Homer, AK WXJ-24 162.40 MHz
Soldotna, AK WWG-39 162.475 MHz"
59°55.6′N 153°29.7′W

Add Position circle [B33] "R Tr" 59°18.6′N 151°56.6′W
(NOS)

★16645 18Ed. 1/12/02 LAST NM 13/02 1/04
Change Note to
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Raspberry I, AK KZZ-90 162.425 MHz
Bede Mt, AK WNG-528 162.450 MHz
Pillar Mt, AK WNG-531 162.525 MHz
Rugged I, AK WNG-526 162.425 MHz
Ninilchik, AK KZZ-97 162.550 MHz
Homer, AK WXJ-24 162.40 MHz"
59°21′38″N 151°04′43″W

Add Position circle [B33] "R Tr" 59°18′37″N 151°56′38″W
(NOS)

16646 12Ed. 11/3/01 LAST NM 8/03 1/04
(Inset Port Graham)
Change Note to
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Bede Mt, AK WNG-528 162.450 MHz
Pillar Mt, AK WNG-531 162.525 MHz
Ninilchik, AK KZZ-97 162.550 MHz
Homer, AK WXJ-24 162.40 MHz"
59°20′08.0″N 151°53′21.0″W
(NOS)

16647 3Ed. 5/12/01 LAST NM 48/01 1/04
Change Note to
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Raspberry I, AK KZZ-90 162.425 MHz
Bede Mt, AK WNG-528 162.450 MHz
Pillar Mt, AK WNG-531 162.525 MHz
Ninilchik, AK KZZ-97 162.550 MHz
Homer, AK WXJ-24 162.40 MHz"
59°21′30″N 151°17′35″W

Add Position circle [B33] "R Tr" 59°18′37″N 151°56′38″W
(NOS)

16648 4Ed. 6/16/01 LAST NM 35/01 1/04
Change Note to
"NOTE
NOAA WEATHER RADIO BROADCASTS
The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Raspberry I, AK KZZ-90 162.425 MHz
Bede Mt, AK WNG-528 162.450 MHz
Pillar Mt, AK WNG-531 162.525 MHz
Ninilchik, AK KZZ-97 162.550 MHz
Homer, AK WXJ-24 162.40 MHz"
59°30′00″N 154°01′00″W
(NOS)

18020 37Ed. 9/03 LAST NM 47/03 1/04
Change Visibility (range) of light to 5M 33°01.9′N 118°33.8′W
(43/03 CG11)

18022 33Ed. 1/26/02 LAST NM 43/03 1/04
Change Visibility (range) of light to 5M 33°01.6′N 118°33.8′W
(43/03 CG11)

18419 11Ed. 12/10/94 LAST NM 46/03 1/04
Add Visibility (range) 4M to light 48°25′27.4″N 123°23′30.2″W
Visibility (range) 4M to light 48°25′25.2″N 123°23′15.6″W
Visibility (range) 4M to light 48°25′33.0″N 123°22′58.6″W
Visibility (range) 3M to light 48°25′29.1″N 123°22′33.3″W
(See 12/03-18419)
(Can LL)

18431 6Ed. 12/02 LAST NM 2/03 1/04
Substitute Depth 61 fathoms for 6 fathoms
48°48′14.0″N 122°51′48.2″W
(NOS)

★18444 15Ed. 4/7/01 LAST NM 34/03 1/04
Add Tabulation of controlling depths from Subsection I-3
(NOS)

★18445 29Ed. 2/24/01 LAST NM 51/03 1/04
(Page B, Inset 4)
Change Note to
"DUWAMISH WATERWAY
Controlling depths for project widths in feet at M.L.L.W.
APR 2003

A. Harbor I Reach 27.6
B. Georgetown Reach 23.9(a)
C. First Ave - 8th Ave Reach 11.9
D. South Park Reach 11.6
E. 14th Ave Bridge Reach 10.6(b)

(a) Shoaling to 17.4 ft last 600 ft of reach
(b) Shoaling to 3.5 ft last 350 ft of reach"
47°30′45″N 122°16′56″W
(NOS)

★18448 33Ed. 9/03 NEW EDITION 1/04
Change Buoy to "TB" Y, Fl Y 2.5s 47°23′06″N 122°21′12″W
(Previously published 45/03)

Change Buoy to "T" Y, Fl Y 2.5s 47°34′35″N 122°27′05″W
(Previously published 51/03)

Change Buoy to "TC" Y, Fl Y 2.5s 47°19′30″N 122°27′24″W
(NOS; USCG LL)

★18558 37Ed. 2/23/02 LAST NM 48/03 1/04
Delete Depth 59 feet 45°34′20.5″N 123°58′41.8″W
Depth 26 feet 45°33′42.5″N 123°57′48.9″W

Substitute Depth 18 feet for 28 feet 45°33′48.6″N 123°57′43.1″W
Depth 23 feet for 30 feet 45°34′12.1″N 123°57′54.9″W
Depth 28 feet for 36 feet 45°33′59.2″N 123°57′58.4″W
Depth 29 feet for 33 feet 45°33′54.2″N 123°57′58.2″W
Depth 34 feet for 44 feet 45°34′24.0″N 123°58′24.9″W
Depth 8 feet for 12 feet 45°33′13.9″N 123°54′41.2″W
Depth 14 feet for 16 feet 45°33′13.1″N 123°55′43.2″W

Change Legend to "15 FEET JUN 2003"
45°33′40.0″N 123°56′13.0″W

Add Depth 7 feet 45°33′20.5″N 123°57′22.2″W
Depth 17 feet 45°33′22.9″N 123°57′38.3″W
Depth 18 feet 45°33′17.9″N 123°57′38.9″W
Depth 24 feet 45°34′11.1″N 123°58′32.2″W
Depth 24 feet 45°34′07.9″N 123°58′34.5″W
Depth 8 feet 45°34′03.1″N 123°57′54.8″W
Depth 20 feet 45°33′50.5″N 123°56′22.6″W
Depth 50 feet 45°34′19.8″N 123°58′41.2″W
Depth 19 feet 45°33′42.4″N 123°57′45.8″W
(NOS)

★18584 47Ed. 8/25/01 LAST NM 52/03 1/04
Add Depth 22 feet 43°40′05.0″N 124°13′16.3″W
(NOS)

★18587 68Ed. 8/25/01 LAST NM 52/03 1/04
Add Tabulation of controlling depths from Subsection I-3
(NOS)

★18601 13Ed. 9/12/98 LAST NM 10/03 1/04
Substitute Depth 13 fathoms for 14 fathoms
42°24′07.5″N 124°27′33.2″W

Add Depth 8 fathoms 42°23′56.9″N 124°26′39.3″W
Depth 7½ fathoms 42°24′02.3″N 124°26′29.2″W
Depth 9 fathoms 42°24′12.1″N 124°26′50.6″W
Depth 11 fathoms 42°23′43.8″N 124°27′01.3″W
Depth 10 fathoms 42°24′17.0″N 124°27′04.8″W
Depth 12 fathoms 42°23′54.3″N 124°27′12.5″W
Depth 13 fathoms 42°23′58.6″N 124°27′29.5″W
Depth 12 fathoms 42°24′16.0″N 124°27′26.5″W
Depth 15 fathoms 42°24′08.4″N 124°27′51.0″W
Depth 14 fathoms 42°24′18.2″N 124°27′39.8″W
(NOS)

★18602 12Ed. 4/03 LAST NM 47/03 1/04
(Inset Chetco Cove)
Change Legend to "12 FEET FOR MID-WIDTH OF 100 FT SEPT 2003" 42°02′40.0″N 124°16′15.8″W
(NOS)

18740 40Ed. 8/03 LAST NM 49/03 1/04
Change Visibility (range) of light to 5M 33°01.4′N 118°33.8′W
(43/03 CG11)

18741 18Ed. 9/9/95 LAST NM N38/03 N1/04
Change Visibility (range) of light to 5M 33°01.4′N 118°33.9′W
(43/03 CG11)

18760 6Ed. 9/5/98 LAST NM N44/03 N1/04
Change Visibility (range) of light to 5M 33°01.4′N 118°33.9′W
(43/03 CG11)

18761 2Ed. 5/27/95 LAST NM N20/02 N1/04
Delete Buoy 32°59′28″N 118°30′09″W

Change Visibility (range) of light to 5M 33°01′27″N 118°33′48″W
(43/03 CG11; NTM0022/2003)

18762 15Ed. 6/6/98 LAST NM 20/02 1/04
Delete Buoy 32°59′26″N 118°30′08″W

Change Visibility (range) of light to 5M 33°01′26″N 118°33′50″W
(43/03 CG11; NTM0022/2003)

★18763 9Ed. 6/16/90 LAST NM 20/02 1/04
Delete Buoy 32°59′26.1″N 118°30′08.3″W

Change Visibility (range) of light to 5M
33°01′25.0″N 118°33′50.0″W
(43/03 CG11; NTM0022/2003)

18769 2Ed. 7/15/95 LAST NM N20/02 N1/04
Delete Buoy 32°59′24″N 118°30′07″W

Change Visibility (range) of light to 5M 33°01′25″N 118°33′55″W
(43/03 CG11; NTM0022/2003)

18775 2Ed. 7/23/88 LAST NM N20/02 N1/04
Delete Buoy 32°59′24″N 118°30′08″W

Change Visibility (range) of light to 5M 33°01′25″N 118°33′49″W
(43/03 CG11; NTM0022/2003)

21033 46Ed. 8/17/96 LAST NM 16/03 1/04
Add Legend "Reported Extinguished" to light
7°28.0′N 82°14.5′W
(NTM0003/2003)

21036 7Ed. 8/10/96 LAST NM 16/03 1/04
Add Legend "Reported Extinguished" to light
7°28.0′N 82°14.5′W
(NTM0003/2003)

22221 20Ed. 8/31/96 LAST NM 34/03 1/04
(Plan D)
Add Range light, front FR 18m 6M (PA)
23°37′12.0″S 70°23′31.0″W
Range light, rear FR 30m 6M (PA)
23°37′17.9″S 70°23′25.0″W

Range line extending in 312° direction from above rear light
dashed for 600 meters, thence
solid for 600 meters

Legend "Lights in line 132°"
along above range line 23°37′00.0″S 70°23′44.5″W
(9(134)03 Valparaiso)

22222 1Ed. 4/14/90 LAST NM 31/03 1/04
Add Light FG 16m 4M (PA) 23°36′43.0″S 70°23′24.0″W
Light 2 QG 13m 4M (PA) 23°36′44.5″S 70°23′31.5″W
Light FR 18m 6M (PA) 23°37′12.0″S 70°23′31.0″W
Light FR 30m 6M (PA) 23°37′17.9″S 70°23′25.0″W
(9(134)03 Valparaiso)

22234 1Ed. 7/18/81 LAST NM 39/97 1/04
(Plan A)
Add Position circle "R Tr" (PA) 20°44′20.6″S 70°11′00.6″W
(9(133)03 Valparaiso)

22331 2Ed. 2/29/88 LAST NM N24/03 N1/04
Delete Depth 21 meters 42°46.3′S 73°03.9′W

Add Depth 6.7 meters enclosed by depth contour (10-meter) 42°46.2′S 73°04.3′W
Depth 1.2 meters, blue tint and enclosing depth contour (5-meter) 42°45.0′S 73°03.1′W
(9(137)03 Valparaiso)

22352 6Ed. 2/1/97 LAST NM 52/03 1/04
Delete Depth 21 meters 42°46.1′S 73°03.4′W

(continued on next page)

22352 (Continued)
Add Depth 6.7 meters, blue tint and enclosing depth contour (10-meter) 42°46.1′S 73°03.7′W
Depth 1.2 meters, blue tint and enclosing depth contour (10-meter) 42°44.9′S 73°02.4′W
(9(137)03 Valparaiso)

22417 1Ed. 11/30/90 LAST NM N25/03 N1/04
Change Legend to "Punta Laponi" 53°13′32″S 72°25′08″W

Add Depth 2 meters, blue tint and enclosing depth contour (5-meter) 53°22′06″S 72°25′43″W
Depth 5 meters, blue tint and enclosing depth contour (5-meter) 53°22′07″S 72°26′42″W

Legend "Ite Gacitua" 53°22′12″S 72°26′36″W
(9(143)03 Valparaiso)

24370 1Ed. 8/31/85 LAST NM 48/03 1/04
Delete Buoy "COR-R" 6°06.7′N 56°58.3′W
(See 48/03-24370)

Change Buoy "COR-N" to "COR-R" RW, conical, ball topmark, Mo(A) 8s 6°02.3′N 57°00.8′W

Add Light "N6" Iso G 8s 5°58.7′N 57°00.9′W
(47(5085)03 Taunton)

24380 2Ed. 3/6/99 LAST NM 48/03 1/04
Delete Buoy "COR-R" 6°06.7′N 56°58.3′W
(See 48/03-24380)

Change Buoy "COR-N" to "COR-R" RW, conical, ball topmark, Mo(A) 8s 6°02.3′N 57°00.8′W

Add Light "N6" Iso G 8s 5°58.7′N 57°00.9′W
(47(5085)03 Taunton)

25600 47Ed. 11/6/93 LAST NM 27/03 1/04
Add Submarine cable (power) [L31.1] joining
18°26.3′N 64°34.0′W
18°24.9′N 64°31.2′W
18°27.0′N 64°26.8′W
18°26.8′N 64°26.3′W
(46(5061)03 Taunton)

25608 21Ed. 7/22/95 LAST NM 38/03 1/04
(Plan A)
Add Chartlet, depicting changes in hydrography, topography, and aids to navigation, from Subsection I-3 18°04′00.0″N 63°05′00.0″W
(9(51)03 Brest)

25609 5Ed. 3/2/96 LAST NM 30/02 1/04
Add Submarine cable (power) [L31.1] joining
18°26′18″N 64°34′02″W
18°26′16″N 64°33′50″W
18°25′32″N 64°33′10″W
18°24′53″N 64°31′15″W
18°27′00″N 64°26′45″W
18°26′47″N 64°26′19″W

Submarine cable (power) [L31.1] joining
18°26′17″N 64°34′03″W
18°26′13″N 64°33′49″W
18°25′12″N 64°32′56″W
18°25′02″N 64°31′17″W
18°26′33″N 64°28′19″W
18°26′44″N 64°28′12″W
18°27′00″N 64°26′45″W

Submarine cable (power) [L31.1] between
18°27′58″N 64°31′26″W
18°27′52″N 64°31′40″W
(46(5061)03 Taunton)

25611 22Ed. 12/30/95 LAST NM 46/01 1/04
Delete Anchorage symbol (large vessels)
18°25′43.0″N 64°27′46.0″W

Add Submarine cable (power) [L31.1] joining
18°26′18.0″N 64°34′01.8″W
18°26′16.2″N 64°33′49.8″W
18°25′32.4″N 64°33′10.2″W
18°24′53.4″N 64°31′15.0″W
18°26′40.1″N 64°27′26.4″W

Submarine cable (power) [L31.1] joining
18°26′16.8″N 64°34′03.0″W
18°26′13.2″N 64°33′49.2″W
18°25′12.0″N 64°32′55.8″W
18°25′02.4″N 64°31′17.4″W
18°26′33.0″N 64°28′19.2″W
18°26′40.1″N 64°28′14.5″W
(46(5061)03 Taunton)

25641 26Ed. 11/17/01 LAST NM 30/02 1/04
Add Submarine cable (power) [L31.1] joining
18°26′18″N 64°34′02″W
18°26′16″N 64°33′50″W
18°25′32″N 64°33′10″W
18°24′53″N 64°31′15″W
18°27′00″N 64°26′45″W
18°26′47″N 64°26′19″W

Submarine cable (power) [L31.1] joining
18°26′17″N 64°34′03″W
18°26′13″N 64°33′49″W
18°25′12″N 64°32′56″W
18°25′02″N 64°31′17″W
18°26′33″N 64°28′19″W
18°26′44″N 64°28′12″W
18°27′00″N 64°26′45″W

Submarine cable (power) [L31.1] between
18°27′58″N 64°31′26″W
18°27′52″N 64°31′40″W
(46(5061)03 Taunton)

37165 2Ed. 2/3/96 LAST NM 52/03 1/04
Add "Dredging Area" [N63] bound by purple dashed line joining 54°55.6′N 8°09.7′E
54°55.4′N 8°11.6′E
54°53.1′N 8°10.7′E
54°53.3′N 8°08.9′E
(41(264)03 Kobenhavn)

37246 14Ed. 5/16/98 LAST NM 46/03 1/04
Add Chartlet A, depicting changes in hydrography, from Subsection I-2 51°22′24″N 3°48′12″E
Chartlet B, depicting changes in hydrography, from Subsection I-2 51°22′00″N 3°55′00″E

(Plan B)
Add Chartlet A, depicting changes in hydrography, from Subsection I-2 51°20′30.0″N 3°47′00.0″E
Chartlet B, depicting changes in hydrography, from Subsection I-2 51°20′30.0″N 3°50′00.0″E
(Neth CH 120)

37400 (INT 1803) 10Ed. 3/12/88 LAST NM 47/03 1/04
Delete HORN from light 46°11.2′N 1°19.3′W

Change Beacon to Fl R 9M and delete topmark 46°08.9′N 1°10.3′W
(Fr CH 7404; Fr LL)

37401 9Ed. 1/31/98 LAST NM 47/03 1/04
Delete HORN from light 46°11′19.8″N 1°19′18.3″W

Change Light to Fl R 4s 9M 46°08′54.0″N 1°10′21.0″W
(Fr CH 7404; Fr LL)

37402 7Ed. 11/1/97 LAST NM 14/03 1/04
Change Beacon to Fl R 4s 10m 9M and delete topmark 46°08′54.0″N 1°10′21.0″W

Period of light to 6s 46°08′49.5″N 1°10′09.0″W
(Fr LL)

37463 6Ed. 2/24/96 LAST NM 43/03 1/04
(Plan)
Change Characteristic of buoy "2" to Fl R 5s 43°27′38.0″N 3°46′03.1″W

(continued on next page)

37463 (Continued)
Buoy "3" to "1" G, pillar, cone topmark, Fl G 5s 43°27′43.5″N 3°46′13.0″W

Characteristic of buoy "4" to Fl(2+1) R 10s 43°27′31.5″N 3°46′52.2″W

Buoy "5" to "3" G, pillar, cone topmark, Fl(2) G 7s 43°27′39.9″N 3°46′26.1″W

Characteristic of buoy "6" to Fl(2) R 7s 43°27′24.4″N 3°47′39.8″W

Buoy "7" to "5" G, pillar, cone topmark, Fl(2+1) G 10s 43°27′31.5″N 3°47′27.2″W
(See 32/00-37463)
(27(514)01 Cadiz; Spn LL)

38607 2Ed. 6/8/96 LAST NM 36/01 1/04
Add Depth 25 meters Wk [K26] 64°17′47″N 22°08′12″W
(4-6(20)2003 Reykjavik)

38610 1Ed. 2/9/91 LAST NM 20/02 1/04
Add Depth 25 meters Wk [K26] 64°17.8′N 22°08.2′W
(4-6(20)2003 Reykjavik)

38670 2Ed. 2/17/96 LAST NM 9/02 1/04
Add Wreck [K29] 66°58.1′N 17°56.1′W
(9-10(23)02 Reykjavik)

43030 24Ed. 4/5/97 LAST NM 48/03 1/04
Change Visibility (range) of light to 19M 55°07.8′N 15°09.4′E
(41(266)03 Kobenhavn)

43127 5Ed. 8/3/96 LAST NM 20/03 1/04
Delete Visibility (range) from light 69°08′16″N 17°23′44″E

Change Visibility (range) of light to 3-2M 69°11′48″N 18°00′27″E

Add Visibility (range) 5-3M to light 69°05′25″N 17°35′18″E

(Plan)
Delete Visibility (range) from light 69°14′32.4″N 17°57′56.2″E

Add Period 10s to light 69°14′11.3″N 17°57′23.7″E
(BA LL)

43140 4Ed. 10/5/96 LAST NM 38/03 1/04
Change Visibility (range) of light to 7-5M 69°16.9′N 15°56.3′E

Add Visibility (range) 8-5M to light 69°06.3′N 15°34.6′E
(BA LL)

43142 4Ed. 1/25/97 LAST NM 12/03 1/04
Add Visibility (range) 5-3M to light 69°05′23″N 17°35′36″E
(BA LL)

43263 7Ed. 4/11/98 LAST NM 46/03 1/04
Change Visibility (range) of light to 7-3M 62°29′18″N 6°03′48″E
(BA LL)

43281 6Ed. 2/7/98 LAST NM 47/03 1/04
Change Height of light to 3m 62°10′45″N 5°24′00″E
Height of range light, rear to 29m 62°13′15″N 5°38′55″E
Light to Fl R 3s 2m 2M 62°20′15″N 5°49′21″E
Visibility (range) of light to 3M 62°21′42″N 5°39′38″E
Height of light to 2m 62°20′32″N 5°38′10″E
(BA LL)

43283 6Ed. 8/17/96 LAST NM 47/03 1/04
Change Height of light to 3m 62°10′45″N 5°24′00″E
(BA LL)

43284 4Ed. 12/18/93 LAST NM 43/03 1/04
Delete Visibility (range) from light 61°43′33″N 4°57′01″E

Change Height of light to 7m 61°45′41″N 5°03′16″E
Height of range light, rear to 12m 61°45′11″N 5°05′20″E
Height of range light, rear to 20m 61°45′07″N 5°08′28″E
Height of light to 7m 61°45′28″N 5°07′59″E
Light to Oc(2) 8s WRG 9-6m 61°46′04″N 4°53′58″E
Period of light to 3s 61°44′26″N 4°50′31″E
Light to Q R 2m 4M 61°51′47″N 5°15′34″E
Height of light to 4m 61°49′32″N 5°07′18″E
(BA LL)

43287 2Ed. 1/24/98 LAST NM 37/03 1/04
Change Height of light to 3m 62°10′45″N 5°24′00″E
Visibility (range) of light to 4M 62°14′52″N 5°57′44″E
Height of range light, rear to 29m 62°13′15″N 5°38′55″E
Visibility (range) of light to 3M 62°14′45″N 5°52′54″E
(BA LL)

44015 8Ed. 7/22/95 LAST NM 50/03 1/04
Change Visibility (range) of light to 19M 55°09.0′N 15°08.0′E
(41(266)03 Kobenhavn)

44040 23Ed. 7/20/96 LAST NM 52/03 1/04
Add Position circle "Wind motor (Fl(3) Y)" [E26] 55°44.0′N 10°35.0′E
Position circle "Wind motor (Fl(3) Y)" [E26] 55°43.5′N 10°35.0′E
Position circle "Wind motor (Fl(3) Y)" [E26] 55°43.0′N 10°35.0′E
Position circle "Wind motor (Fl(3) Y)" [E26] 55°42.6′N 10°35.0′E

Submarine cable (power) [L31.1] joining 55°46.0′N 10°35.6′E
55°44.0′N 10°35.0′E
55°42.5′N 10°35.0′E
(18(101)03 Kobenhavn)

44046 10Ed. 7/13/96 LAST NM 24/03 1/04
Delete Submarine pipeline (sewer) between 55°38′00″N 11°05′00″E
55°37′28″N 11°04′16″E

Add Position circle "Wind motor (Fl(3) Y)" [E26] 55°44′01″N 10°35′00″E
Position circle "Wind motor (Fl(3) Y)" [E26] 55°43′32″N 10°35′00″E
Position circle "Wind motor (Fl(3) Y)" [E26] 55°43′02″N 10°35′00″E
Position circle "Wind motor (Fl(3) Y)" [E26] 55°42′33″N 10°35′00″E

Submarine cable (power) [L31.1] joining 55°46′01″N 10°35′37″E
55°44′01″N 10°35′00″E
55°42′33″N 10°35′00″E

Submarine pipeline (sewer) [L41.1] between 55°38′04″N 11°04′48″E
55°37′36″N 11°04′00″E
(18(101, 102)03 Kobenhavn)

44049 9Ed. 6/15/96 LAST NM 50/03 1/04
Add Buoy Y, pillar, "X" topmark, Fl Y 2s 55°39′55″N 12°58′05″E
(7(940)03 Norrkoping)

44051 1Ed. 7/25/92 LAST NM 27/03 1/04
Add Buoy "Current meter 2" Y, pillar, "X" topmark, Fl Y 2s 55°39′54.6″N 12°58′04.8″E
(7(940)03 Norrkoping)

44061 21Ed. 9/7/96 LAST NM 32/03 1/04
Add Position circle "Wind motor (Fl(3) Y)" [E26] 55°44.0′N 10°35.0′E
Position circle "Wind motor (Fl(3) Y)" [E26] 55°43.5′N 10°35.0′E
Position circle "Wind motor (Fl(3)Y)" [E26] 55°43.0′N 10°35.0′E
Position circle "Wind motor (Fl(3)Y)" [E26] 55°42.6′N 10°35.0′E

Submarine pipeline (water) [L41.1] between 55°00.0′N 10°27.5′E
54°58.5′N 10°26.2′E

(continued on next page)

44061 (Continued)
Submarine cable (power) [L31.1] joining
55°46.0′N 10°35.6′E
55°44.0′N 10°35.0′E
55°42.5′N 10°35.0′E
(18(101, 104)03 Kobenhavn)

44062 8Ed. 1/11/97 LAST NM 40/03 1/04
Add "Under reclamation (2003)" area [F31] bound by shore and dashed line joining 55°30′23″N 9°44′20″E
55°30′25″N 9°44′21″E
55°30′26″N 9°44′26″E
55°30′24″N 9°44′28″E
(18(105)03 Kobenhavn)

44063 8Ed. 4/2/94 LAST NM 17/03 1/04
Add Submarine pipeline (water) [L41.1] between
54°59′58″N 10°27′27″E
54°58′31″N 10°26′10″E
(18(104)03 Kobenhavn)

44064 19Ed. 6/29/96 LAST NM 28/03 1/04
Delete Submarine pipeline (sewer) between 55°38.0′N 11°05.0′E
55°37.5′N 11°04.3′E

Add Position circle "Wind motor (Fl(3) Y)" [E26]
55°44.0′N 10°35.0′E
Position circle "Wind motor (Fl(3) Y)" [E26]
55°43.5′N 10°35.0′E
Position circle "Wind motor (Fl(3) Y)" [E26]
55°43.0′N 10°35.0′E
Position circle "Wind motor (Fl(3) Y)" [E26]
55°42.6′N 10°35.0′E

Submarine cable (power) [L31.1] joining
55°46.0′N 10°35.6′E
55°44.0′N 10°35.0′E
55°42.5′N 10°35.0′E

Submarine pipeline (sewer) [L41.1] between
55°38.1′N 11°04.8′E
55°37.6′N 11°04.0′E
(18(101, 102)03 Kobenhavn)

44120 7Ed. 2/22/97 LAST NM 49/03 1/04
Change Visibility (range) of light to 19M 55°07.8′N 15°09.4′E
(41(266)03 Kobenhavn)

44182 4Ed. 5/28/94 LAST NM 49/03 1/04
Delete Buoy 59°18′25.2″N 18°05′56.8″E
Buoy 59°18′23.0″N 18°05′53.5″E
Buoy 59°18′17.1″N 18°06′04.8″E
Buoy 59°18′14.2″N 18°06′13.0″E
Buoy 59°18′20.4″N 18°06′01.2″E
Buoy 59°18′22.2″N 18°05′58.2″E
Buoy 59°18′21.6″N 18°05′56.4″E
(See 18/03-44182)

Change Legend "VERT CL 6.5M" to "VERT CL 5.4M" 59°22′30.0″N 18°02′45.0″E
Legend "VERT CL 6.3M" to "VERT CL 4.3-5.2M" 59°21′30.0″N 18°06′15.0″E
Legend "VERT CL 12.6M" to "VERT CL 11.5M" 59°21′27.0″N 18°06′24.0″E
Legend "VERT CL 3.1M" to "VERT CL 3.0M" 59°19′36.0″N 18°08′48.0″E
Legend "VERT CL 3.1M" to "VERT CL 3.0M" 59°19′48.0″N 18°07′54.0″E
Legend "VERT CL 4.1M" to "VERT CL 3.0M" 59°19′50.0″N 18°05′38.0″E
Legend "VERT CL 3.1M" to "VERT CL 3.0M" 59°19′36.0″N 18°04′48.0″E
Legend "VERT CL 5.3M" to "VERT CL 4.5M" 59°19′42.0″N 18°04′12.0″E
Legend "VERT CL 5.4M" to "VERT CL 4.6M" 59°19′18.0″N 18°04′00.0″E
Legend "VERT CL 5.4M" to "VERT CL 4.6M" 59°19′18.0″N 18°04′12.0″E
Legend "VERT CL 12.8M" to "VERT CL 11.7M" 59°18′48.0″N 18°06′18.0″E
Legend "VERT CL 4.4M" to "VERT CL 3.3M" 59°18′08.0″N 18°06′42.0″E
Legend "VERT CL 32.1M" to "VERT CL 25.2-31.3M" 59°18′12.0″N 18°04′42.0″E
Legend "VERT CL 12.8M" to "VERT CL 11.7M" 59°18′12.0″N 18°04′48.0″E
Legend "VERT CL 21.5M" to "VERT CL 20.7M" 59°18′36.0″N 18°02′42.0″E
Legend "VERT CL 26.0M" to "VERT CL 25.2M" 59°18′18.0″N 18°02′18.0″E
Legend "VERT CL 15.5M" to "VERT CL 13.7-14.7M" 59°18′53.0″N 18°02′04.0″E
Legend "VERT CL 3.6M" to "VERT CL 3.0M" 59°19′12.0″N 18°01′42.0″E
Legend "VERT CL 12.0M" to "VERT CL 11.2M" 59°19′12.0″N 18°01′54.0″E
Legend "VERT CL 3.8M" to "VERT CL 3.0M" 59°19′12.0″N 18°02′06.0″E
Legend "VERT CL 24.0M" to "VERT CL 23.2M" 59°19′22.0″N 18°01′50.0″E
Legend "VERT CL 4.1M" to "VERT CL 3.3M" 59°19′42.0″N 18°03′24.0″E
Legend "VERT CL 5.5M" to "VERT CL 4.7M" 59°19′54.0″N 18°02′54.0″E
Legend "VERT CL 5.5M" to "VERT CL 4.7M" 59°19′49.0″N 18°03′15.0″E
Legend "VERT CL 14.5M" to "VERT CL 13.7M" 59°20′08.0″N 18°02′48.0″E
Legend "VERT CL 10.0M" to "VERT CL 9.2M" 59°20′15.0″N 18°02′06.0″E
Legend "VERT CL 5.9M" to "VERT CL 5.1M" 59°20′27.0″N 18°00′48.0″E
Legend "VERT CL 17.5M" to "VERT CL 16.8M" 59°20′29.0″N 18°00′42.0″E
Legend "VERT CL 26.0M" to "VERT CL 25.2M" 59°20′00.0″N 17°59′42.0″E
Legend "VERT CL 12.0M" to "VERT CL 11.2M" 59°19′33.0″N 18°00′36.0″E
Legend "VERT CL 9.0M" to "VERT CL 8.2M" 59°19′36.0″N 18°00′22.0″E
Legend "VERT CL 16.0M" to "VERT CL 15.2M" 59°19′24.0″N 17°59′54.0″E
Legend "VERT CL 26.0M" to "VERT CL 25.2M" 59°19′06.0″N 17°59′54.0″E

Add Legend "NOTE NO 5" 59°22′42.0″N 18°04′48.0″E

Note No. 5 to NOTES
"5. Pontoon bridge set out annually from 1 November to 15 April. Sound is then closed to navigation." 59°21′30.0″N 18°10′34.0″E

Swept depth 4 meters Obstn [K42]
59°22′54.0″N 18°02′43.2″E

Legend "VERT CL 3.3M" 59°19′54.0″N 18°03′06.0″E
Legend "VERT CL 7.0M" 59°22′30.0″N 18°02′48.0″E
Buoy R, spar 59°18′26.0″N 18°05′59.1″E
Buoy R, spar 59°18′22.1″N 18°05′58.1″E
Buoy (mooring) [Q40] 59°18′26.5″N 18°05′03.5″E

Submarine pipeline [L40.1] between
59°18′12.8″N 18°06′14.5″E
59°18′14.5″N 18°06′16.5″E

Submarine cable [L30.1] joining
59°19′14.2″N 18°06′08.4″E
59°19′17.4″N 18°06′13.8″E
59°19′19.2″N 18°06′14.4″E

Submarine cable [L30.1] joining
59°19′19.2″N 18°06′14.4″E
59°19′06.0″N 18°06′22.8″E
59°18′58.8″N 18°06′24.0″E
59°18′55.8″N 18°06′25.2″E
(21(405), 33(607)01, 10(122), 44(605)02, 17-18(1115)03 Norrkoping)

44186 2Ed. 6/15/96 LAST NM 49/03 1/04
Add Dangerous submerged rock [K13] 59°35′14″N 19°09′44″E
(37(490)02 Norrkoping)

44192 1Ed. 12/18/93 LAST NM 48/03 1/04
Delete Buoy (mooring) 59°22′59″N 17°46′57″E
(33(438)02 Norrkoping)

52043 21Ed. 7/4/98 LAST NM 52/03 1/04
Change Light to Fl(2) G 8s 36°08′15.0″N 5°26′37.1″W
Light to Fl R 5s 5m 2M 36°09′30.2″N 5°21′42.3″W
(See 16/01-52043)
(Spn LL)

52062 7Ed. 9/23/00 LAST NM 34/03 1/04
Add "Under Reclamation (2001)" area bound by
shore and dashed line joining 37°33′31.0″N 0°58′04.0″W
37°33′29.4″N 0°57′56.4″W
37°33′31.8″N 0°57′36.3″W
37°33′33.3″N 0°57′57.6″W
37°33′36.9″N 0°58′00.0″W
37°33′39.6″N 0°58′05.4″W
37°33′37.5″N 0°58′18.4″W
37°34′02.0″N 0°58′42.6″W
37°34′02.7″N 0°58′44.8″W
37°34′00.0″N 0°58′48.0″W
37°33′33.6″N 0°58′18.0″W

(Plan B)
Add "Under Reclamation (2001)" area bound by
shore, chart border and dashed line joining
37°33′31.8″N 0°57′36.3″W
37°33′33.3″N 0°57′57.6″W
37°33′36.9″N 0°58′00.0″W
37°33′39.6″N 0°58′05.4″W
37°33′37.5″N 0°58′13.4″W
37°33′36.3″N 0°58′18.0″W
37°33′50.5″N 0°58′32.0″W
37°33′46.2″N 0°58′32.0″W
37°33′33.6″N 0°58′18.0″W
(Spn CH 4642)

53204 10Ed. 2/10/96 LAST NM 5/03 1/04
Add Light Fl(2) 5s 3m 2M 35°58′18.6″N 14°21′31.2″E
(45/03 Valletta; BA LL)

★**53262** 8Ed. 10/11/03 NEW EDITION 1/04
(NGA)

54463 5Ed. 6/29/96 LAST NM 14/02 1/04
(Plan A)
Add Danger circle [K40] "Obstn (Marine farm)"
34°38′36.6″N 33°01′19.2″E
(See 17/97-54463)

(Plan C)
Add Danger circle [K40] "Obstn (Marine farm)"
34°42′13.8″N 33°17′46.2″E
Buoy (mooring) [Q41] Fl(4) 15s
34°42′33.6″N 33°17′01.2″E

(Plan D)
Add Danger circle [K40] "Obstn (Marine farm)"
34°41.80′N 33°12.12′E
Danger circle [K40] "Obstn (Marine farm)"
34°41.82′N 33°14.03′E
Danger circle [K40] "Obstn (Marine farm)"
34°42.23′N 33°17.77′E
Danger circle [K40] "Obstn (Marine farm)"
34°42.20′N 33°16.99′E
Danger circle [K40] "Obstn (Marine farm)"
34°38.61′N 33°01.32′E

Buoy (mooring) [Q41] Fl(4) 15s 34°42.56′N 33°17.02′E
(45(4174, 4175)99 Taunton)

55044 5Ed. 3/23/96 LAST NM 52/03 1/04
Add Buoy (wavemeter) Y, spherical, Fl 3s [Q59]
40°24′35″N 26°44′04″E
(26(118)03 Istanbul)

55048 12Ed. 9/9/00 LAST NM 20/03 1/04
(Panel A)
Add Buoy (wavemeter) Y, spherical, Fl 3s [Q59]
41°12′15.0″N 29°06′34.2″E
Buoy (wavemeter) Y, spherical, Fl 3s [Q59]
41°10′36.6″N 29°04′36.0″E
Buoy (wavemeter) Y, spherical, Fl 3s [Q59]
41°09′39.0″N 29°03′25.8″E
Buoy (wavemeter) Y, spherical, Fl 3s [Q59]
41°07′55.8″N 29°04′40.8″E

(Panel B)
Add Buoy (wavemeter) Y, spherical, Fl 3s [Q59]
41°05′13.2″N 29°03′29.4″E
Buoy (wavemeter) Y, spherical, Fl 3s [Q59]
41°04′31.2″N 29°03′27.6″E
Buoy (wavemeter) Y, spherical, Fl 3s [Q59]
41°04′15.0″N 29°02′49.2″E
Buoy (wavemeter) Y, spherical, Fl 3s [Q59]
41°02′50.4″N 29°02′46.8″E
(25(114)03 Istanbul)

62434 9Ed. 12/8/01 LAST NM 50/03 1/04
Delete Buoy 29°56′30″N 48°35′20″E

Add Legend "(PA)" to position circle "Pile"
29°51′33″N 48°33′38″E

Stranded wreck [K24] 29°52′44″N 48°35′16″E
Platform [L10] "Rep (1996)" 29°48′27″N 48°45′42″E
Legend "(ED)" to buoy "Kafka" 29°50′06″N 48°46′34″E

Legend "(ED)" to buoy "Outer Western"
29°50′26″N 48°46′24″E

Dangerous wreck [K28] 29°50′24″N 48°47′03″E
Buoy "Kafka 1" G, can 29°50′20″N 48°46′48″E
Stranded wreck [K24] 29°54′44″N 48°38′10″E
Stranded wreck [K24] 29°54′54″N 48°38′02″E
Stranded wreck [K24] 29°55′15″N 48°37′30″E
Stranded wreck [K24] 29°55′22″N 48°37′24″E
Stranded wreck [K24] 29°55′57″N 48°37′08″E
Stranded wreck [K24] 29°55′48″N 48°36′27″E
Stranded wreck [K24] 29°56′02″N 48°36′18″E
Stranded wreck [K24] 29°56′24″N 48°35′58″E
Stranded wreck [K24] 29°56′20″N 48°35′24″E
Platform [L10] 29°55′48″N 48°37′22″E
Platform [L10] 29°55′56″N 48°36′54″E
Platform [L10] 29°56′15″N 48°36′28″E
(BA CH 3842)

62570 4Ed. 1/26/02 LAST NM 50/03 1/04
Add Platform [L10] "Rep (1996)" 29°48′27″N 48°45′42″E
Dangerous wreck [K28] 29°50′24″N 48°47′03″E
Stranded wreck [K24] 29°52′44″N 48°35′16″E
(BA CH 3842)

62590 2Ed. 5/29/99 LAST NM 50/03 1/04
Add Platform [L10] "Rep (1996)" 29°48′27″N 48°45′42″E
Legend "(ED)" to buoy "Kafka" 29°50′06″N 48°46′34″E
Dangerous wreck [K28] 29°50′24″N 48°47′03″E
Buoy "Kafka 1" G, can 29°50′20″N 48°46′48″E
Stranded wreck [K24] 29°52′44″N 48°35′16″E

Legend "(PA)" to position circle "Pile"
29°51′33″N 48°33′38″E
Legend "(ED)" to buoy "Outer Western"
29°50′26″N 48°46′24″E
(BA CH 3842)

62591 3Ed. 5/29/99 LAST NM N50/03 N1/04
Add Platform [L10] "Rep (1996)" 29°48′27″N 48°45′42″E
Legend "(ED)" to buoy "Kafka" 29°50′06″N 48°46′34″E

Legend "(ED)" to buoy "Outer Western"
29°50′26″N 48°46′24″E

Dangerous wreck [K28] 29°50′24″N 48°47′03″E
Buoy "Kafka 1" G, can 29°50′20″N 48°46′48″E
Stranded wreck [K24] 29°52′44″N 48°35′16″E

Legend "(PA)" to position circle "Pile"
29°51′33″N 48°33′38″E
(BA CH 3842)

74152 11Ed. 7/29/95 LAST NM 34/03 1/04
Delete Buoy "14" 32°53′13.9″S 151°45′44.7″E

Dashed line between 32°54′50.7″S 151°48′14.8″E
32°54′42.9″S 151°48′08.5″E
(See 20/01-74152)

Add Dashed line between 32°54′44.3″S 151°48′06.1″E
32°54′49.3″S 151°48′18.3″E
(16(515), 19(624)03 Wollongong)

74153 2Ed. 3/4/95 LAST NM 41/03 1/04
Delete Dashed line between 32°54′50.7″S 151°48′14.8″E
32°54′42.9″S 151°48′08.5″E

Add Dashed line between 32°54′44.3″S 151°48′06.1″E
32°54′49.3″S 151°48′18.3″E
(19(624)03 Wollongong)

74205 2Ed. 11/12/94 LAST NM 35/03 1/04
Add Double solid line with land tint (wharf extension) [F14] between 23°49′17.4″S 151°14′38.8″E
23°49′21.3″S 151°14′42.3″E
Dashed line between 23°49′22.2″S 151°14′43.0″E
23°49′21.3″S 151°14′42.3″E
(12(394)03 Wollongong)

74292 8Ed. 8/29/98 LAST NM 27/03 1/04
Relocate Light from 10°29.00′S 142°14.80′E to
10°29.04′S 142°14.78′E
(19(625)03 Wollongong)

74295 3Ed. 9/19/98 LAST NM 35/03 1/04
Relocate Light from 10°29′02.0″S 142°14′48.0″E to
10°29′02.2″S 142°14′46.7″E
(19(625)03 Wollongong)

75222 8Ed. 5/30/98 LAST NM 40/02 1/04
(Plan C)
Substitute Depth 10.3 meters for 11 meters
41°03′07.4″S 145°54′44.5″E
(1(57)03 Wollongong)

75261 6Ed. 5/10/97 LAST NM 38/03 1/04
Add Light Fl Y 3s 34°22′10″S 150°55′39″E
(18(587)03 Wollongong)

75262 6Ed. 6/3/95 LAST NM 16/03 1/04
Add Light Fl Y 3s 34°22′09.5″S 150°55′38.9″E
(18(587)03 Wollongong)

75263 9Ed. 9/27/97 LAST NM 31/03 1/04
Delete Purple dashed line and legend "Quarantine Line" joining 33°59′59.8″S 151°12′33.7″E
33°59′48.0″S 151°12′26.0″E
33°59′33.0″S 151°12′26.0″E
33°59′06.0″S 151°12′44.2″E
Purple dashed line and legend "Quarantine Area" joining 33°59′33.0″S 151°12′26.0″E
33°59′33.0″S 151°12′56.0″E
33°59′48.0″S 151°12′56.0″E
33°59′48.0″S 151°12′26.0″E
(23(640)99 Wollongong)

75264 17Ed. 10/3/98 LAST NM 32/03 1/04
Delete Buoy 33°49′03.0″S 151°16′58.2″E
Relocate Buoy from 33°48′58.8″S 151°16′24.6″E to
33°49′01.7″S 151°16′24.6″E
Buoy from 33°51′49.2″S 151°15′57.0″E to
33°51′48.5″S 151°15′59.2″E
(23(642)99, 6(168)00 Wollongong)

★81711 6Ed. 5/11/96 LAST NM 31/03 1/04
(Plan A)
Add Note
"NOTE
Any vessel transiting within a 20nm radius of Roi-Namur Island, part of Kwajalein Atoll, may experience interference with marine VHF communications, especially VHF International Channel 16. Authorized transiting vessels should stay clear of this area." 9°25′00″N 167°28′00″E

(Plan C)
Add Note
"NOTE
Any vessel transiting within a 20nm radius of Roi-Namur Island, part of Kwajalein Atoll, may experience interference with marine VHF communications, especially VHF International Channel 16. Authorized transiting vessels should stay clear of this area." 8°44′00″N 167°41′00″E
(NTM0022/2003)

81715 4Ed. 9/20/86 LAST NM 31/03 1/04
Add Note
"NOTE
Any vessel transiting within a 20nm radius of Roi-Namur Island, part of Kwajalein Atoll, may experience interference with marine VHF communications, especially VHF International Channel 16. Authorized transiting vessels should stay clear of this area." 8°48′12″N 167°23′36″E
Legend "See Note" 8°43′30″N 167°41′54″E
Legend "See Note" 9°24′42″N 167°28′40″E
(NTM0022/2003)

93721 5Ed. 6/5/99 LAST NM 52/03 1/04
Add Depth 0.1 meter, blue tint and enclosing depth contour (2-meter) 22°12′22″N 113°55′26″E
Depth 3.2 meters 22°12′42″N 113°59′26″E
(42(887, 888)03 Tianjin)

93733 13Ed. 6/28/97 LAST NM 52/03 1/04
Delete Anchorage symbol 22°12′36″N 114°12′28″E
Add Depth 3.2 meters 22°12′42″N 113°59′26″E
(37(776), 42(888)03 Tianjin)

93736 22Ed. 6/27/98 LAST NM 50/03 1/04
Delete Depth 6.9 meters 22°20′31.2″N 114°05′18.6″E
Add Depth 6.3 meters 22°20′32.5″N 114°05′17.9″E
Depth 9.3 meters 22°20′31.6″N 114°05′20.2″E
Depth 8.2 meters 22°20′12.5″N 114°05′30.1″E
(24(75)03 Hong Kong)

94028 7Ed. 9/16/95 LAST NM 52/03 1/04
Change Visibility (range) of light to 12M 33°47.2′N 130°27.0′E
(43(1621)03 Tokyo)

94216 6Ed. 4/20/96 LAST NM 47/03 1/04
Delete Buoy "9" 31°07′08″N 121°58′44″E
(See 10/03-94216)
Relocate Buoy "8" from 31°06′23″N 122°00′18″E to
31°06′35″N 121°59′50″E
(45(798, 799)02 Tianjin)

95087 3Ed. 4/30/94 LAST NM 31/03 1/04
Change Visibility (range) of light to 8M
36°00′17.0″N 126°40′16.0″E
(See 22/97-95087)
(46(850)03 Inchon)

95102 8Ed. 8/12/95 LAST NM 27/03 1/04
Add Beacon BRB, double ball topmark 34°24′53″N 127°02′23″E
(46(845)03 Inchon)

95160 13Ed. 8/19/95 LAST NM 40/03 1/04
Change Visibility (range) of light to 12M 33°47.2′N 130°27.0′E
(43(1621)03 Tokyo)

★95276 4Ed. 10/4/03 NEW EDITION 1/04
(NGA)

★97152 9Ed. 10/18/03 NEW EDITION 1/04
(NGA)

97157 2Ed. 8/2/03 LAST NM 40/03 1/04
Add Legend "Lesser depths reported (2003)"
35°40′09.0″N 139°57′12.0″E
(43(1638)03 Tokyo)

97181 20Ed. 3/26/94 LAST NM 46/03 1/04
Delete Light 34°49′41″N 136°57′29″E
(43(1616)03 Tokyo)

97182 13Ed. 1/1/94 LAST NM 46/03 1/04
Delete Light 34°49′40.7″N 136°57′29.0″E
(43(1616)03 Tokyo)

97241 6Ed. 2/21/98 LAST NM 10/03 1/04
Delete Dashed line between 33°51′07.1″N 132°41′46.3″E
33°51′09.5″N 132°41′46.0″E
(See 10/03-97241)

Add Double dashed line (breakwater) with legend
"Under construction" between 33°51′20.1″N 132°41′45.4″E
33°51′07.1″N 132°41′46.3″E
(43(1618)03 Tokyo)

97261 15Ed. 1/31/98 LAST NM 44/03 1/04
Add Dashed line (breakwater) with legend
"Under constr" between 33°51′20″N 132°41′45″E
33°51′07″N 132°41′46″E
(43(1618)03 Tokyo)

97266 5Ed. 7/5/97 LAST NM 42/03 1/04
Change Characteristic of buoy "2" to Mo(A) 8s
33°44′04″N 131°53′51″E
Characteristic of buoy "3" to Mo(A) 8s
33°43′15″N 131°58′23″E
Characteristic of buoy "4" to Mo(A) 8s
33°42′24″N 132°03′23″E
Characteristic of buoy "5" to Iso 4s
33°41′36″N 132°08′05″E
Characteristic of buoy "6" to Mo(A) 8s
33°42′51″N 132°13′02″E
Characteristic of buoy "7" to Mo(A) 8s
33°44′17″N 132°18′00″E
Characteristic of buoy "8" to Iso 4s
33°49′54″N 132°32′36″E
(43(1619)03 Tokyo)

97272 11Ed. 6/14/97 LAST NM 47/03 1/04
Change Characteristic of buoy "1" to Iso 4s
33°50′38″N 131°44′39″E
Characteristic of buoy "2" to Iso 4s
33°57′43″N 131°44′42″E
Characteristic of buoy "2" to Iso 4s
33°59′47″N 131°38′57″E
(43(1620)03 Tokyo)

97273 11Ed. 5/31/03 LAST NM 52/03 1/04
Change Characteristic of buoy "No 1" to Iso 4s
33°50′38″N 131°44′39″E
Characteristic of buoy "No 2" to Iso 4s
33°57′43″N 131°44′41″E
Characteristic of buoy "No 2" to Iso 4s
33°59′47″N 131°38′57″E
Characteristic of buoy "No 2" to Mo(A) 8s
33°44′04″N 131°53′51″E
Characteristic of buoy "No 3" to Mo(A) 8s
33°43′15″N 131°58′23″E
Characteristic of buoy "No 4" to Mo(A) 8s
33°42′24″N 132°03′23″E
(43(1619, 1620)03 Tokyo)

97277 11Ed. 11/27/93 LAST NM 39/03 1/04
Change Characteristic of buoy "1" to Iso 4s
33°50′26″N 131°44′46″E
Characteristic of buoy "2" to Iso 4s
33°57′30″N 131°44′57″E
Characteristic of buoy "2" to Mo(A) 8s
33°43′54″N 131°54′00″E
Characteristic of buoy "3" to Mo(A) 8s
33°43′04″N 131°58′30″E
Characteristic of buoy "4" to Mo(A) 8s
33°42′15″N 132°03′33″E
Characteristic of buoy "5" to Iso 4s
33°41′26″N 132°08′14″E
Characteristic of buoy "6" to Mo(A) 8s
33°42′42″N 132°13′11″E
Characteristic of buoy "7" to Mo(A) 8s
33°44′10″N 132°18′12″E
Characteristic of buoy "8" to Iso 4s
33°49′43″N 132°32′48″E
(43(1619, 1620)03 Tokyo)

97420 17Ed. 9/20/97 LAST NM 45/03 1/04
Change Visibility (range) of light to 12M 33°47.2′N 130°27.0′E
(43(1621)03 Tokyo)

97425 6Ed. 1/30/99 LAST NM 45/03 1/04
Change Visibility (range) of light to 12M 33°47′14″N 130°26′57″E
(43(1621)03 Tokyo)

800669 8Ed. 9/15/90 LAST NM N20/02 N1/04
Delete Buoy 32°59′28″N 118°30′06″W

Change Visibility (range) of light to 5M 33°01′25″N 118°33′49″W
(43/03 CG11; NTM0022/2003)

802260 5Ed. 5/15/93 LAST NM N20/02 N1/04
Delete Buoy 32°59′26.5″N 118°30′07.1″W

Change Visibility (range) of light to 5M
33°01′26.0″N 118°33′48.0″W
(43/03 CG11; NTM0022/2003)

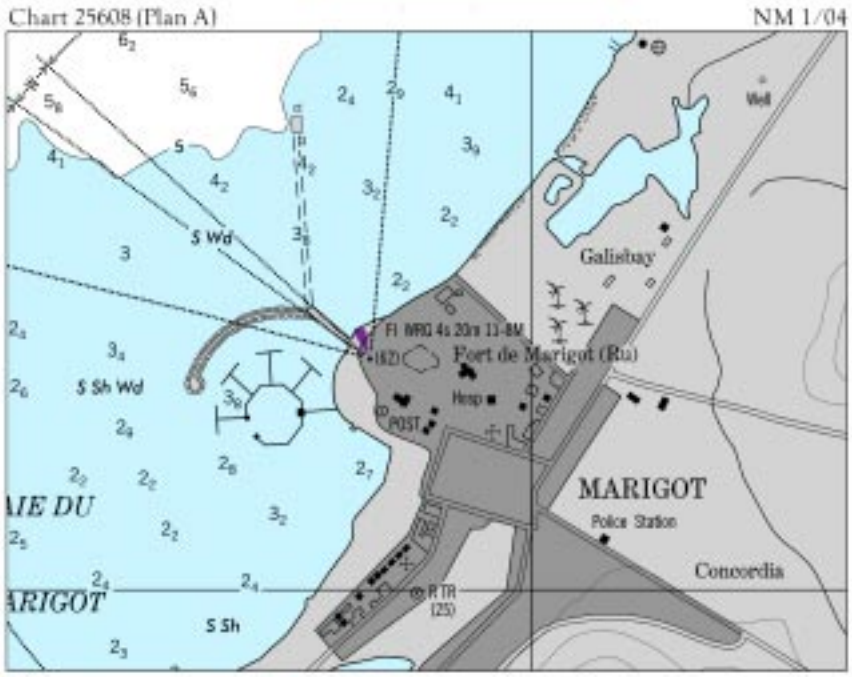


Chart 25608 (Plan A)
NM 1/04
5 Wd
Fl WRG 4s 20m 11-8M
(82)
Fort de Marigot (Ru)
Galisbay
Well
Hosp
POST
5 Sh Wd
MARIGOT
Police Station
Concordia
RTR
(25)
5 Sh

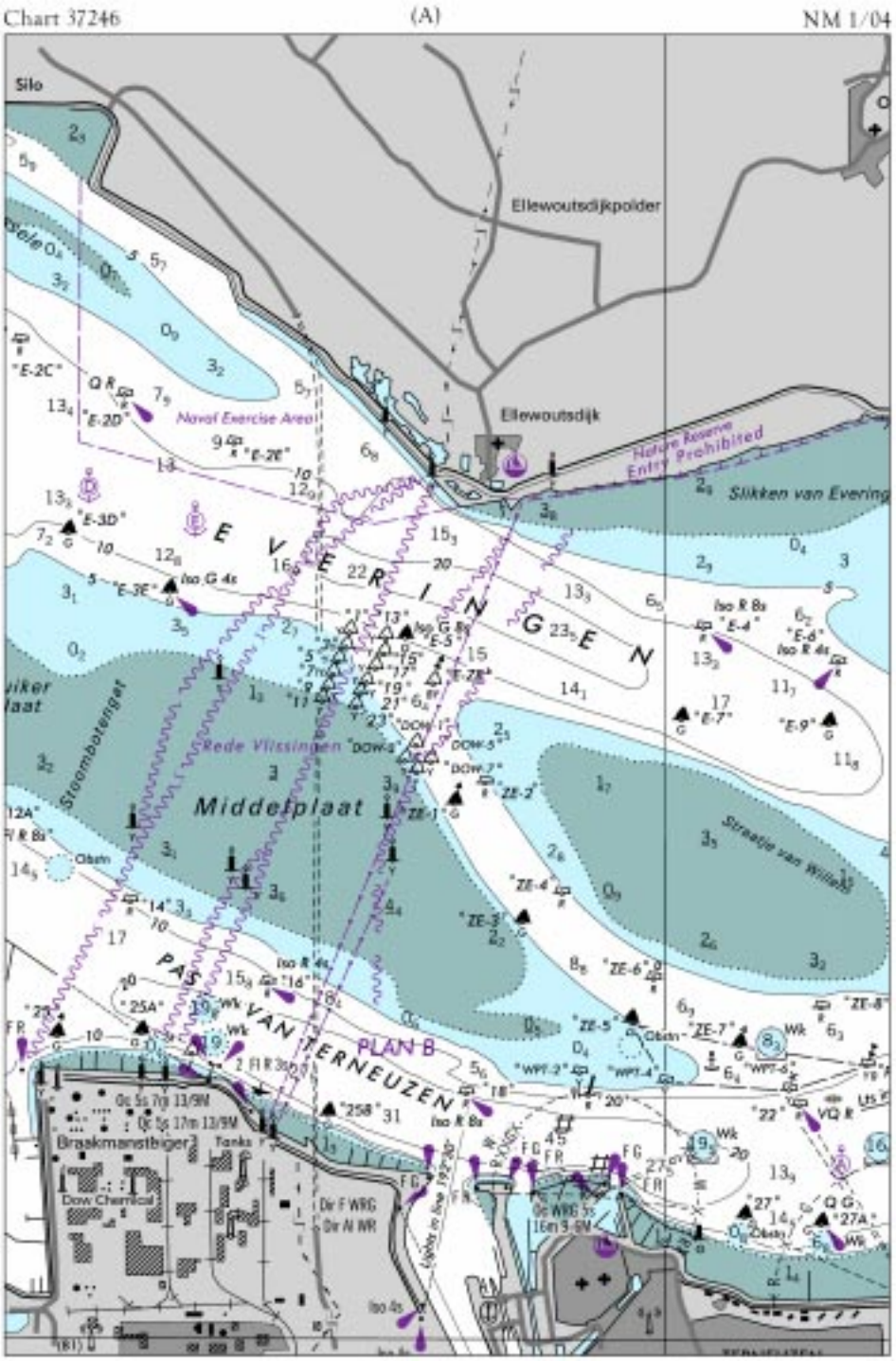


Chart 37246
(A)
NM 1/04
Silo
Ellewoutsdijkpolder
Ellewoutsdijk
Naval Exercise Area
Nature Reserve Entry Prohibited
Slikken van Evering
E V E R I N G E N
Middelplaat
Rede Vlissingen
Stroombatengat
Straatje van Willebrordus
PAS VAN TERNEUZEN
PLAN B
Braakmanstbiger
Dow Chemical
Tanks

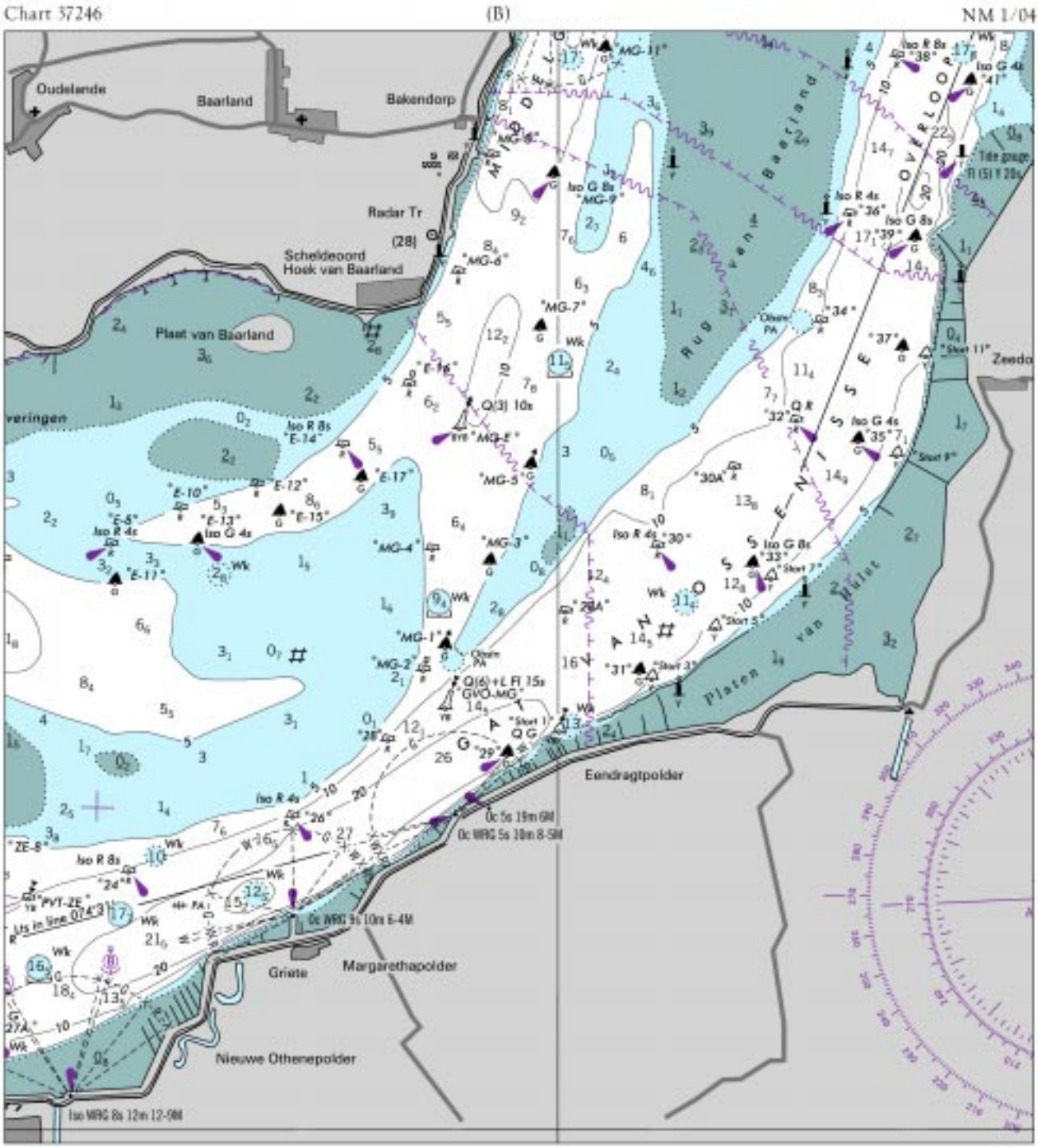


Chart 37246
(B)
NM 1/04
Oudelande
Baarland
Bakendorp
Radar Tr
(28)
Scheldeoord
Hoek van Baarland
Plaat van Baarland
Rug van Baarland
Overloop van Baarland
Zeedo
Eendragtpolder
Griete
Margarethapolder
Nieuwe Othenepolder
Iso WRG 8s 12m 12-9M
Oc 5s 19m 6M
Oc WRG 5s 10m 8-5M
Oc WRG 3s 10m 6-4M
Tide gauge
Fl (5) Y 20s

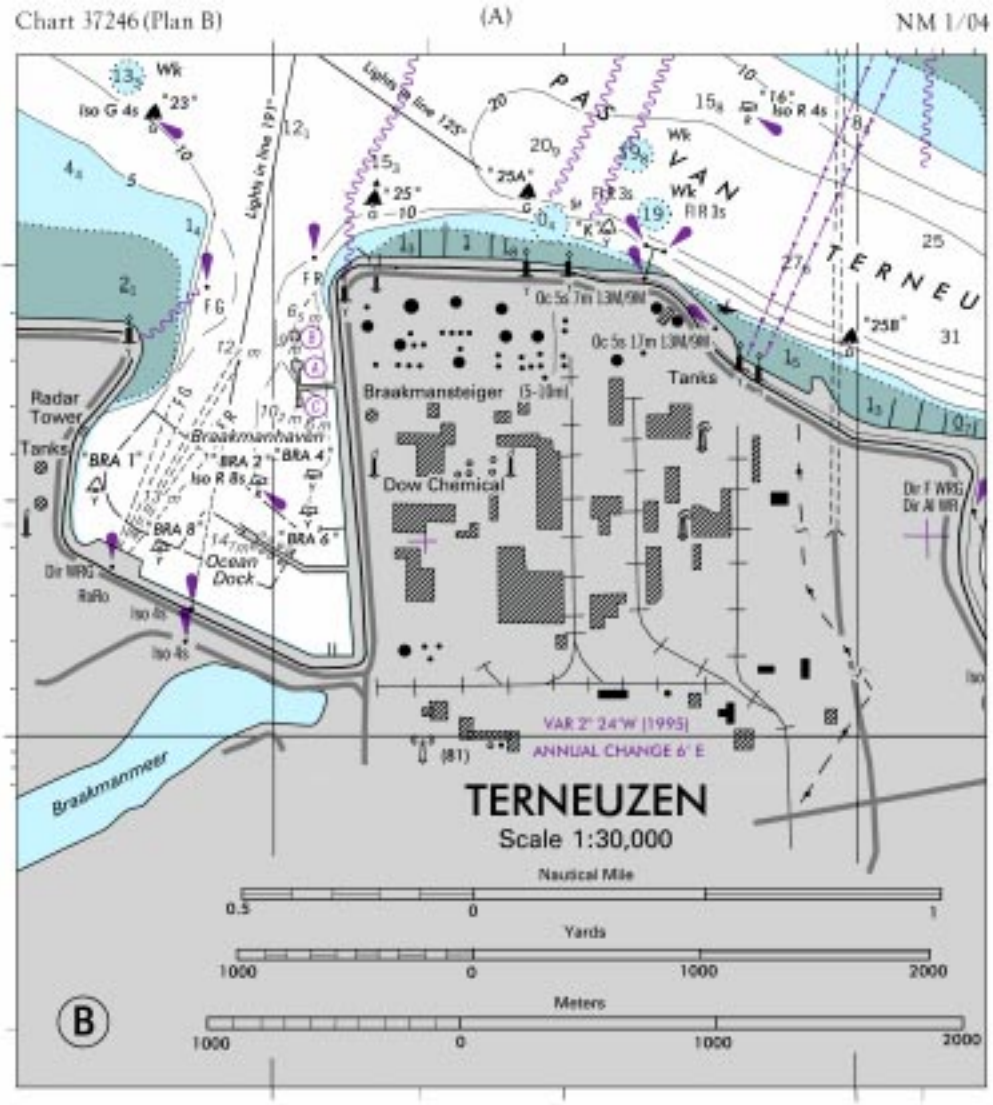


Chart 37246 (Plan B)
(A)
NM 1/04
Wk
Iso G 4s
"23"
Lights in line 191°
Lights in line 125°
PAS VAN
"25A"
Wk
RR 3s
"16"
Iso R 4s
"25"
TERNEU
"25B"
Tanks
Radar Tower
Tanks
Braakmanhaven
BRA 1"
BRA 2"
Iso R 8s
BRA 4"
BRA 6"
BRA 8"
Ocean Dock
Dir WRG
RoRo
Iso 4s
Iso 4s
Braakmansteiger (5-10m)
Dow Chemical
Oc 5s 17m L3M/9M
Oc 5s 17m L3M/9M
Tanks
Dir F WRG
Dir Al WR
VAR 2° 24'W (1995)
ANNUAL CHANGE 6' E
(81)
Braakmanmeer
TERNEUZEN
Scale 1:30,000
Nautical Mile
0.5
0
1
Yards
1000
0
1000
2000
Meters
1000
0
1000
2000
B

Chart 37246 (Plan B) (B) NM 1/04

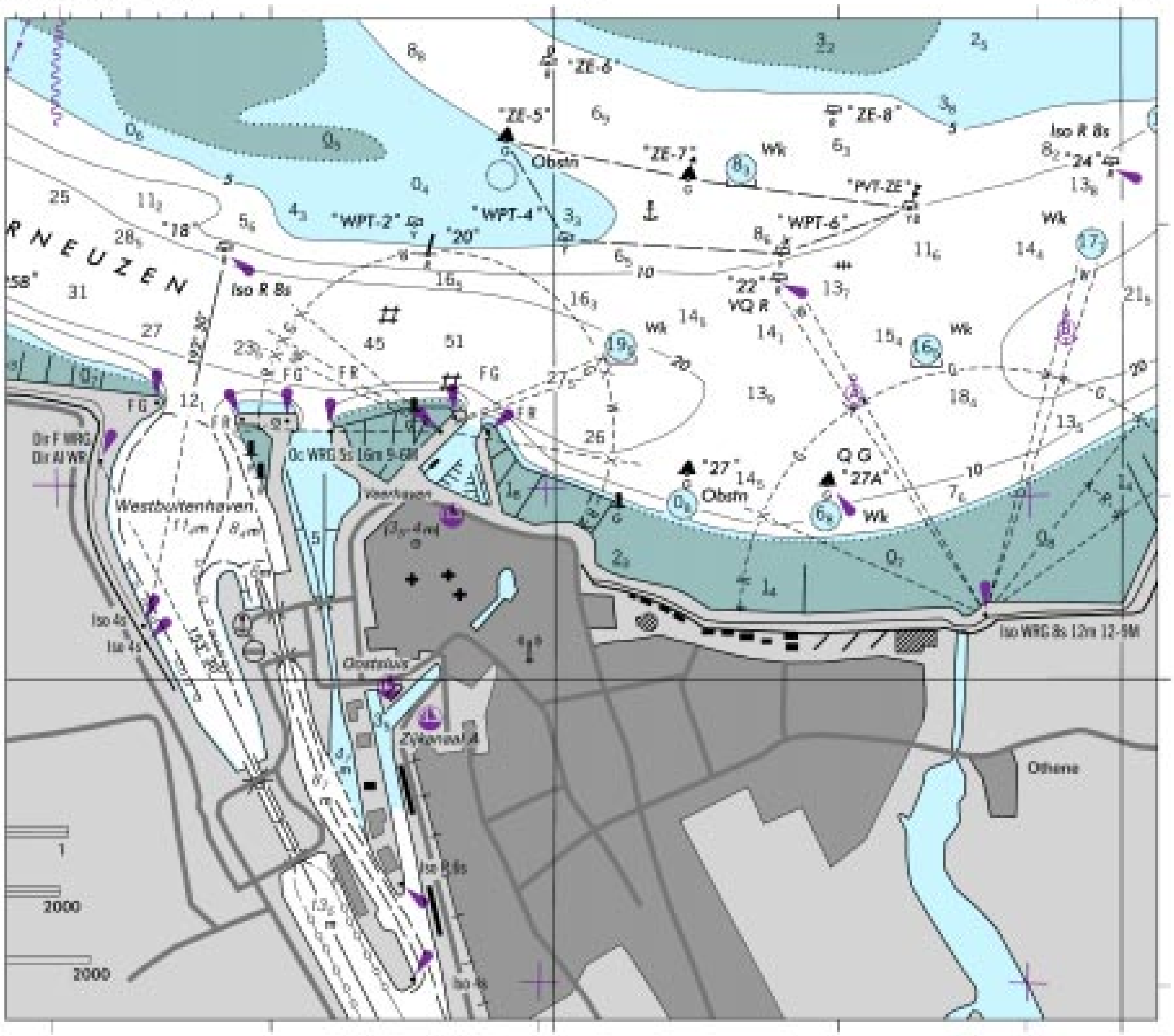


Chart 11301 NM 1/04

BROWNSVILLE AND PORT ISABEL HARBORS CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF NOV 2003

	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)				PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
BRAZOS SANTIAGO PASS:							
ENTRANCE CHANNEL	46.0	46.0	46.0	12-02	300	1.7	44
LAGUNA MADRE CHANNEL	33.0	37.0	33.0	9-03	250	2.5	42
BROWNSVILLE SHIP CHANNEL:							
JUNCTION BASIN TO BOCA CHICA PASSING BASIN	44.0	44.0	44.0	12-02	250	3.5	42
BOCA CHICA PASSING BASIN TO GOOSE I. PASSING BASIN	44.0	44.0	44.0	12-02	250	4.7	42
GOOSE I. PASSING BASIN TO BROWNSVILLE TURNING BASIN	41.0	43.0	43.0	7-03	300	2.4	42
BROWNSVILLE TURNING BASIN	31.0	37.0	35.0	12-01; 12-02	500-1200	1.7	42-36
PORT ISABEL CHANNEL:							
JUNCTION TO TURNING BASIN (INCLUDING WIDENER AT JUNCTION)	36.0	36.0	34.0	2-02	200	1.0	36
PORT ISABEL TURNING BASIN	35.0	35.0	34.0	2-02	1000	0.2	36
CUT OFF CHANNEL	36.0	36.0	36.0	2-02	200	0.9	36

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11302 (Side B) NM 1/04

BROWNSVILLE AND PORT ISABEL HARBORS CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF NOV 2003

	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)				PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
BRAZOS SANTIAGO PASS:							
ENTRANCE CHANNEL	46.0	46.0	46.0	12-02	300	1.7	44
LAGUNA MADRE CHANNEL	33.0	37.0	33.0	9-03	250	2.5	42
BROWNSVILLE SHIP CHANNEL:							
JUNCTION BASIN TO BOCA CHICA PASSING BASIN	44.0	44.0	44.0	12-02	250	3.5	42
BOCA CHICA PASSING BASIN TO GOOSE I. PASSING BASIN	44.0	44.0	44.0	12-02	250	4.7	42
GOOSE I. PASSING BASIN TO BROWNSVILLE TURNING BASIN	41.0	43.0	43.0	7-03	300	2.4	42
BROWNSVILLE TURNING BASIN	31.0	37.0	35.0	12-01; 12-02	500-1200	1.7	42-36
PORT ISABEL CHANNEL:							
JUNCTION TO TURNING BASIN (INCLUDING WIDENER AT JUNCTION)	36.0	36.0	34.0	2-02	200	1.0	36
PORT ISABEL TURNING BASIN	35.0	35.0	34.0	2-02	1000	0.2	36
CUT OFF CHANNEL	36.0	36.0	36.0	2-02	200	0.9	36

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11305 NM N1/04

CORPUS CHRISTI CHANNEL DEPTHS
Tabulated from surveys by the Corps of Engineers - Report of November 2003

Name of channel	Controlling depths from seaward in feet at mean lower low water (MLLW)					Project Dimensions		
	Left Outside Quarter	Left Inside Quarter	Right Inside Quarter	Right Outside Quarter	Date of Survey	Width (Feet)	Length (Nautical Miles)	Depth MLLW (Feet)
Aransas Pass Outer Bar	45	47	47	44	1-03	700-600	2.42	47
Jetty Channel to Cline Point	49	46	45	43	8-03	600	1.11	47-45
Inner Basin of Harbor Island	45	49	47	46	8-03	600-1559	0.5	45
Cline Point to West End Humble Oil Co. Basin	52	56	56	53	8-03	600	0.5	45
Thence to Corpus Christi	35	42	45	40	2-02; 1-03	600-300	17.9	45
Channel to La Quinta	43	43	44	38	6-02	300-400	4.7	45

NOTE: CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11309 NM 1/04

CORPUS CHRISTI CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF NOV 2003

NAME OF CHANNEL	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
ARANSAS PASS OUTER BAR	45.0	47.0	47.0	44.0	1-03	700-600	2.42	47
JETTY CHANNEL TO CLINE POINT	49.0	46.0	45.0	43.0	8-03	600	1.11	47-45
INNER BASIN AT HARBOR ISLAND	45.0	49.0	47.0	46.0	8-03	600-1559	0.5	45
CLINE POINT TO WEST END HUMBLE OIL CO. BASIN	52.0	56.0	56.0	53.0	8-03	600	0.5	45
THENCE TO CORPUS CHRISTI	35.0	42.0	45.0	40.0	2/02-1/03	600-300	17.9	45
CHANNEL TO LA QUINTA	43.0	43.0	44.0	38.0	6-02	300-400	4.7	45
TURNING BASIN	43.0	43.0	45.0	46.0	6-02	1200	.30	45

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11310 NM N1/04

CORPUS CHRISTI CHANNEL DEPTHS
Tabulated from surveys by the Corps of Engineers - Report of November 2003

Name of channel	Controlling depths from seaward in feet at mean lower low water (MLLW)					Project Dimensions		
	Left Outside Quarter	Left Inside Quarter	Right Inside Quarter	Right Outside Quarter	Date of Survey	Width (Feet)	Length (Nautical Miles)	Depth MLLW (Feet)
Aransas Pass Outer Bar	45	47	47	44	1-03	700-600	2.42	47
Jetty Channel to Cline Point	49	46	45	43	8-03	600	1.11	47-45
Inner Basin of Harbor Island	45	49	47	46	8-03	600-1559	0.5	45
Cline Point to West End Humble Oil Co. Basin	52	56	56	53	8-03	600	0.5	45
Thence to Corpus Christi	35	42	45	40	2-02; 1-03	600-300	17.9	45
Channel to La Quinta	43	43	44	38	6-02	300-400	4.7	45

NOTE: CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11311 NM 1/04

CORPUS CHRISTI CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF NOV 2003

	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
WEST END OF HUMBLE OIL CO.								
BASIN TO CORPUS CHRISTI	35.0	42.0	45.0	40.0	2/02-1/03	600-300	17.9	45
CORPUS CHRISTI:								
TURNING BASIN	43.0	46.0	46.0	40.0	2-02	300-800	1.1	45
INDUSTRIAL CANAL	42.0	44.0	46.0	43.0	2-02	400	0.5	45
AVERY POINT								
TURNING BASIN	41.0	44.0	44.0	41.0	2-02	400-975	0.4	45
CHEMICAL TURNING BASIN	40.0	46.0	44.0	40.0	2-02	400-1200	0.4	45
TULE LAKE CHANNEL	35.0	46.0	44.0	37.0	5-02	200-400	3.3	45
TULE LAKE TURNING BASIN	43.0	44.0	45.0	40.0	2-02	1200-300	0.4	45
CHANNEL TO VIOLA	45.0	46.0	45.0	40.0	2-02	300-200	1.5	45
VIOLA TURNING BASIN	42.0	46.0	45.0	40.0	2-02	700-900	0.3	45

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11312 NM 1/04

CORPUS CHRISTI CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF NOV 2003

	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
ARANSAS PASS OUTER BAR	45.0	47.0	47.0	44.0	1-03	700-600	2.42	47
JETTY CHANNEL TO CLINE POINT	49.0	46.0	45.0	43.0	8-03	600	1.11	47-45
INNER BASIN AT HARBOR ISLAND	45.0	49.0	47.0	46.0	8-03	600-1559	0.5	45
CLINE POINT TO WEST END								
HUMBLE OIL CO. BASIN	52.0	56.0	56.0	53.0	8-03	600	0.5	45
THENCE TO CORPUS CHRISTI	35.0	42.0	45.0	40.0	2/02-1/03	600-300	17.9	45
CHANNEL TO LA QUINTA	43.0	43.0	44.0	38.0	6-02	300-400	4.7	45

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11316 NM 1/04

MATAGORDA SHIP CHANNEL

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF NOV 2003

	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)				PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
SEA BAR AND JETTY CHANNEL	39.0	39.0	39.0	2-03	300	3.21	38
THENCE TO LIGHT 48	30.0	34.0	30.0	3-03	300-200	10.84	36
THENCE TO LIGHT 76	28.0	29.0	26.0	2-03	200	7.42	36
THENCE TO POINT							
COMFORT TURNING BASIN	28.0	29.0	26.0	3-03	200-399	0.98	36
TURNING BASIN	32.0	33.0	32.0	3-03	1000	0.17	36

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11317 NM 1/04

MATAGORDA SHIP CHANNEL

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF NOV 2003

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
SEA BAR AND JETTY CHANNEL	39.0	39.0	39.0	2-03	300	3.21	38
THENCE TO LIGHT 48	30.0	34.0	30.0	3-03	300-200	10.84	36
THENCE TO LIGHT 76	28.0	29.0	26.0	2-02	200	7.42	36
THENCE TO POINT COMFORT TURNING BASIN	28.0	29.0	26.0	3-03	200-399	0.98	36
TURNING BASIN	32.0	33.0	32.0	3-03	1000	0.17	36

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11318 NM N1/04

CORPUS CHRISTI CHANNEL DEPTHS
Tabulated from surveys by the Corps of Engineers - Report of November 2002

Controlling depths from seaward in feet at mean lower low water (MLLW)						Project Dimensions		
Name of channel	Left Outside Quarter	Left Inside Quarter	Right Inside Quarter	Right Outside Quarter	Date of Survey	Width (Feet)	Length (Nautical Miles)	Depth MLLW (Feet)
Avery Point Turning Basin	41	44	44	41	2-02	400-975	0.4	45
Industrial Canal	42	44	46	43	2-02	400	0.5	45
Corpus Christi Turning Basin	43	46	46	40	2-02	300-800	1.1	45
Corpus Christi Channel	35	42	45	40	2-02; 1-03	600-300	17.9	45
La Quinta Channel	43	43	44	38	6-02	300-400	4.7	45
La Quinta Turning Basin	43	43	45	46	6-02	1200	0.3	45

NOTE: CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11322 (Side B) NM 1/04

FREEPORT HARBOR CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF NOV 2003

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOW TIDE (MLT)					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
CHANNEL FROM DEEP WATER TO SEAWARD END OF JETTY	49.0	50.0	49.0	10-03	400	3.7	47
JETTY CHANNEL	44.0	46.0	41.0	10-03	400	1.2	45
LOWER TURNING BASIN	43.0	48.0	39.0	10-03	750	0.9	45
THENCE TO BRAZOSPORT TURNING BASIN	44.0	47.0	45.0	7-03	400-600	0.4	45
BRAZOSPORT TURNING BASIN	44.0	47.0	46.0	7-03	500-1000	0.2	45
CHANNEL TO UPPER TURNING BASIN	45.0	48.0	47.0	7-03	280-470	0.9	45
BRAZOS HARBOR APPROACH CHANNEL	39.0	41.0	40.0	1-03	200-650	0.5	36
BRAZOS HARBOR TURNING BASIN	36.0	38.0	40.0	1-03	750	0.1	36
UPPER TURNING BASIN	46.0	48.0	48.0	7-03	600-1190	0.2	45
CHANNEL TO STAUFFER TURNING BASIN	17.0	19.0	17.5	11-88	200	1.0	25
STAUFFER TURNING BASIN	18.0	18.0	16.0	11-88	500	0.1	25

INFORMATION IN THIS TABULATION HAS BEEN PROVIDED TO NOAA BY THE U.S. ARMY CORPS OF ENGINEERS. DEPTHS ARE REFERENCED TO A LOCAL DREDGING REFERENCE CALLED MEAN LOW TIDE. FOR AN APPROXIMATE CONVERSION TO MEAN LOWER LOW WATER, ADD 1 FOOT TO EACH DEPTH IN THE TABULATION.

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11324 NM 1/04

GALVESTON BAY AND HOUSTON SHIP CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF NOV 2003

NAME OF CHANNEL	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOW TIDE (MLT)					PROJECT DIMENSIONS		
	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
GALVESTON HARBOR:								
ENTRANCE CHANNEL	46.0	46.0	46.0	44.0	7-03	800-1000	7.5	45
OUTER BAR CHANNEL	36.0	43.0	47.0	47.0	7-03	800	1.5	45
INNER BAR CHANNEL	37.0	42.0	43.0	34.0	7-03	800	2.9	45
BOLIVAR ROADS CHANNEL	48.0	48.0	46.0	41.0	9-02	800	0.7	45
HOUSTON SHIP CHANNEL:								
BOLIVAR ROADS TO LOWER END OF MORGAN PT.	36.0	41.0	39.0	33.0	10/02-10/03	400-530	23.4	40
GALVESTON CHANNEL	30.0	36.0	31.0	21.0	7-03	1125-1075	3.5	40
TEXAS CITY CHANNEL	38.0	41.0	44.0	41.0	10-03	400	5.9	40
TEXAS CITY TURNING BASIN	37.0	37.0	37.0	37.0	10-03	1200	0.5	40

INFORMATION IN THIS TABULATION HAS BEEN PROVIDED TO NOAA BY THE U.S. ARMY CORPS OF ENGINEERS. DEPTHS ARE REFERENCED TO A LOCAL DREDGING REFERENCE CALLED MEAN LOW TIDE. FOR AN APPROXIMATE CONVERSION TO MEAN LOWER LOW WATER, ADD 1 FOOT TO EACH DEPTH IN THE TABULATION.

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11325 NM 1/04

HOUSTON SHIP CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF NOV 2003

NAME OF CHANNEL	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOW TIDE (MLT).					PROJECT DIMENSIONS		
	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
HOUSTON SHIP CHANNEL:								
EXXON OIL CO. SLIP TO CARPENTERS BAYOU (A)	32.0	36.0	42.0	34.0	7-03	400-525	4.90	40
THENCE TO GREENS BAYOU (B)	43.0	41.0	40.0	41.0	7-03	400-300	4.70	40
GREENS BAYOU CHANNEL (TO FIRST BEND)	39.0	42.0	44.0	42.0	4-02	500-175	0.34	36
THENCE TO HUNTING BAYOU (UPPER BEND)	37.0	41.0	42.0	39.0	9-03	300	1.91	40
TURNING POINT AT HUNTING BAYOU	39.0	41.0	41.0	38.0	9-03	600	0.17	40
THENCE TO SOUTHERN PACIFIC SLIP	37.0	40.0	41.0	37.0	9-03	300	3.04	40
TURNING POINT AT SIMS BAYOU	40.0	41.0	41.0	40.0	9-03	700	0.26	40
THENCE TO HOUSTON TURNING BASIN WHARF 15	39.0	42.0	41.0	37.0	9-03	300	2.69	36
TURNING POINT AT BRADY ISLAND	31.0	37.0	39.0	39.0	7-03	422	0.17	36
HOUSTON TURNING BASIN	36.0	35.0	37.0	35.0	7-02	250-1000	0.70	36
UPPER TURNING BASIN	19.0	23.0	19.0	18.0	7-03	150	0.23	36

A. CHANNEL WIDENS 125 FEET IN LEFT OUTSIDE QUARTER IN VICINITY OF EXXON OIL CO.

B. CHANNEL NARROWS IN VICINITY OF THE SHELL OIL CO. SLIP.

INFORMATION IN THIS TABULATION HAS BEEN PROVIDED TO NOAA BY THE U.S. ARMY CORPS OF ENGINEERS. DEPTHS ARE REFERENCED TO A LOCAL DREDGING REFERENCE CALLED MEAN LOW TIDE. FOR AN APPROXIMATE CONVERSION TO MEAN LOWER LOW WATER, ADD 1 FOOT TO EACH DEPTH IN THE TABULATION.

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11327 NM 1/04

HOUSTON SHIP CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF NOV 2003

NAME OF CHANNEL	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOW TIDE (MLT)					PROJECT DIMENSIONS		
	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
BOLIVAR ROADS TO LOWER END OF MORGAN POINT	36.0	41.0	39.0	33.0	10/02-10/03	400-530	23.4	40

INFORMATION IN THIS TABULATION HAS BEEN PROVIDED TO NOAA BY THE U.S. ARMY CORPS OF ENGINEERS. DEPTHS ARE REFERENCED TO A LOCAL DREDGING REFERENCE CALLED MEAN LOW TIDE. FOR AN APPROXIMATE CONVERSION TO MEAN LOWER LOW WATER, ADD 1 FOOT TO EACH DEPTH IN THE TABULATION.

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11328 NM 1/04

HOUSTON SHIP CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF NOV 2003

NAME OF CHANNEL	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOW TIDE (MLT)					PROJECT DIMENSIONS		
	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
BOLIVAR ROADS TO LOWER END OF MORGAN POINT	36.0	41.0	39.0	33.0	10/02-10/03	400-530	23.4	40
LOWER END OF MORGAN PT. TO EXXON OIL CO. SLIP	36.0	40.0	36.0	32.0	7-03	400-525	4.2	40

INFORMATION IN THIS TABULATION HAS BEEN PROVIDED TO NOAA BY THE U.S. ARMY CORPS OF ENGINEERS. DEPTHS ARE REFERENCED TO A LOCAL DREDGING REFERENCE CALLED MEAN LOW TIDE. FOR AN APPROXIMATE CONVERSION TO MEAN LOWER LOW WATER, ADD 1 FOOT TO EACH DEPTH IN THE TABULATION.

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11332 NM 1/04

SABINE PASS CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF NOV 2003

NAME OF CHANNEL	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
SABINE BANK CHANNEL	40	45	40	38	7-03	800	12.8	42
OUTER BAR CHANNEL	42	42	42	42	9-03	800	3.0	42
JETTY CHANNEL	36	42	42	31	7-03	800-500	3.5	40

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11341 NM 1/04

SABINE PASS CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF NOV 2003

NAME OF CHANNEL	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
SABINE BANK CHANNEL	40	45	40	38	7-03	800	12.8	42
OUTER BAR CHANNEL	42	42	42	42	9-03	800	3.0	42
JETTY CHANNEL	36	42	42	31	7-03	800-500	3.5	40

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11342 NM 1/04

SABINE PASS - SABINE - NECHES CANAL CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - REPORT OF NOV 2003

NAME OF CHANNEL	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
SABINE PASS:								
OUTER BAR CHANNEL	42	42	42	42	9-03	800	3.0	42
JETTY CHANNEL	36	42	42	31	7-03	800-500	3.5	40
PASS CHANNEL	24	28	41	27	7-03	500-1150	4.9	40
ANCHORAGE BASIN	33	21	11	1	2-03	1500	0.5	40
PORT ARTHUR SHIP CANAL	36	41	39	35	7-03	500	4.8	40
JUNCTION PORT ARTHUR-SABINE NECHES CANALS	32	36	33	35	10-03	400-1200	1.1	40
ENTRANCE TO PORT ARTHUR TURNING BASINS	36	38	38	36	10-03	282-735	0.2	40
EAST TURNING BASIN	40	40	40	41	8-03	370-547	0.3	40
WEST TURNING BASIN	38	38	39	38	10-03	350-735	0.3	40
CHANNEL CONNECTING WEST BASIN AND TAYLOR BAYOU TURNING BASIN	38	42	41	40	8-03	200-350	0.5	40
TAYLOR BAYOU TURNING BASIN	23	26	30	31	8-03	90-1233	0.6	40
SABINE-NECHES CANAL:								
PORT ARTHUR TO NECHES RIVER	28	37	35	28	7-03	400	9.6	40
NECHES RIVER TO SABINE RIVER	24	26	27	25	7-03	200	3.9	30

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11353 NM 1/04

MISSISSIPPI RIVER - GULF OUTLET CHANNEL

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO OCT 2003

NAME OF CHANNEL	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)			WIDTH (FEET)	DATE OF SURVEY
	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER		
LT. BUOY 1 (29°25'27"N, 88°59'31"W) TO LT. BUOY 20	38.0	38.0	34.0	600	7,10-03
THENCE TO END OF JETTY OPPOSITE LIGHT 62	28.0	34.0	26.0	500	6,7,8,10-03

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGING CONDITIONS SUBSEQUENT TO THE ABOVE

Chart 11363 NM 1/04

MISSISSIPPI RIVER - GULF OUTLET CHANNEL

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO OCT 2003

NAME OF CHANNEL	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)			WIDTH (FEET)	DATE OF SURVEY
	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER		
LT. BUOY 1 (29°25'27"N, 88°59'31"W) TO LT. BUOY 20	38.0	38.0	34.0	600	7,10-03
THENCE TO END OF JETTY OPPOSITE LIGHT 62	28.0	34.0	26.0	500	6,7,8,10-03
THENCE TO INTERSECTION WITH G. I. W. W.	26.0	32.0	22.0	500	6,7,8,9-03
THENCE TO INNER HARBOR NAVIGATION CANAL	26.0	28.0	29.0	500	8,9-03

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGING CONDITIONS SUBSEQUENT TO THE ABOVE

Chart 11364 NM 1/04

MISSISSIPPI RIVER - GULF OUTLET CHANNEL

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO OCT 2003

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)

NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	WIDTH (FEET)	DATE OF SURVEY
LT. BUOY 1 (29°25'27"N, 88°59'31"W) TO LT. BUOY 20	38.0	38.0	34.0	600	7,10-03
THENCE TO END OF JETTY OPPOSITE LIGHT 62	28.0	34.0	26.0	500	6,7,8,10-03
THENCE TO INTERSECTION WITH G. I. W. W.	26.0	32.0	22.0	500	6,7,8,9-03
THENCE TO INNER HARBOR NAVIGATION CANAL	26.0	28.0	29.0	500	8,9-03

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGING CONDITIONS SUBSEQUENT TO THE ABOVE

Chart 11369 NM 1/04

MISSISSIPPI RIVER - GULF OUTLET CHANNEL

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO OCT 2003

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)

NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	WIDTH (FEET)	DATE OF SURVEY
LT. BUOY 1 (29°25'27"N, 88°59'31"W) TO LT. BUOY 20	38.0	38.0	34.0	600	7,10-03
THENCE TO END OF JETTY OPPOSITE LIGHT 62	28.0	34.0	26.0	500	6,7,8,10-03
THENCE TO INTERSECTION WITH G. I. W. W.	26.0	32.0	22.0	500	6,7,8,9-03
THENCE TO INNER HARBOR NAVIGATION CANAL	26.0	28.0	29.0	500	8,9-03

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGING CONDITIONS SUBSEQUENT TO THE ABOVE

Chart 11545 NM 1/04

MOREHEAD CITY HARBOR CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO OCT 2003

	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
BEAUFORT INLET CHANNEL FROM 2000 FT NORTH OF LTD. BUOY "8"	39.7	45.1	40.4	27.1	10-03	450-800	2.26	47
CUTOFF CHANNEL	47.8	49.4	47.0	39.1	10-03	600	0.38	42
MOREHEAD CITY CHANNEL	33.4	42.5	42.2	37.9	6-03	400	1.10	40
TURNING BASIN								
EAST LEG	43.4	42.4	43.4	40.5	6-03	400-870	0.78	40
WEST LEG	33.7	36.0	37.2	39.9	6-03	800-3000	0.59	35

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 11547 NM 1/04

MOREHEAD CITY HARBOR CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO OCT 2003

NAME OF CHANNEL	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
	LEFT OUTSIDE QUARTER	LEFT INSIDE QUARTER	RIGHT INSIDE QUARTER	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
BEAUFORT INLET CHANNEL FROM								
2000 FT NORTH OF LTD. BUOY "8"	39.7	45.1	40.4	27.1	10-03	450-800	2.26	47
CUTOFF CHANNEL	47.8	49.4	47.0	39.1	10-03	600	0.38	42
MOREHEAD CITY CHANNEL	33.4	42.5	42.2	37.9	6-03	400	1.10	40
TURNING BASIN								
EAST LEG	43.4	42.4	43.4	40.5	6-03	400-870	0.78	40
WEST LEG	33.7	36.0	37.2	39.9	6-03	800-3000	0.59	35

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 12311 NM 1/04

CHRISTINA RIVER CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO SEP 2003

NAME OF CHANNEL	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT CHRISTINA RIVER DATUM				PROJECT DIMENSIONS		
	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT MILES)	DEPTH (FEET)
ENTRANCE CHANNEL TO THE UPPER END OF THE TURNING BASIN	34.9	34.3	34.8	9-03	500-340	0.70	38
THENCE TO THE LOBDELL CANAL TURNING BASIN (OPPOSITE TERMINAL WHARF)	35.0 / 34.9	24.3 / 35.3	30.7 / 35.6	9-03	400 / 320	0.33 / 0.34	35 / 38

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 12312 NM 1/04

CHRISTINA RIVER CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO SEP 2003

NAME OF CHANNEL	CONTROLLING DEPTHS FROM SEAWARD IN FEET AT CHRISTINA RIVER DATUM				PROJECT DIMENSIONS		
	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT MILES)	DEPTH (FEET)
ENTRANCE CHANNEL TO THE UPPER END OF THE TURNING BASIN	34.9	34.3	34.8	9-03	500-340	0.70	38
THENCE TO THE LOBDELL CANAL TURNING BASIN (OPPOSITE TERMINAL WHARF)	35.0 / 34.9	24.3 / 35.3	30.7 / 35.6	9-03	400 / 320	0.33 / 0.34	35 / 38

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 18444 NM 1/04

EVERETT HARBOR AND SNOHOMISH RIVER

TABULATED FROM SURVEYS BY THE CORPS OF ENGINEERS - SURVEYS TO MAY 2003

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
ENTRANCE TO SETTLING BASIN	12.6	11.9	13.0	2-99, 5-03	150-425	1.1	15
SETTLING BASIN	11.3	10.1	9.4	2-99, 5-03	700	0.2	20
SETTLING BASIN TO R.R. BRIDGE	7.4	5.3	4.5	2-99, 5-03	150	2.2	8
R.R. BRIDGE TO OPPOSITE WEYERHAUSER CO. (48°00'27.0"N, 122°10'41.0"W)	7.2	7.0	7.0	2-99, 5-03	150	0.7	8
WEYERHAUSER CO. TO OPPOSITE 19TH ST. (47°59'29.0"N 122°10'42.0"W)	9.0	7.7	6.3	2-99, 5-03	150	1.1	8

NOTE: THE PROJECT WIDTH IS 100 FEET AT THE BRIDGES.
NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

Chart 18587 NM 1/04

COOS BAY AND ISTHMUS SLOUGH CHANNEL DEPTHS

TABULATED FROM SURVEYS BY THE COPRS OF ENGINEERS - SURVEYS TO SEP 2003

CONTROLLING DEPTHS FROM SEAWARD IN FEET AT MEAN LOWER LOW WATER (MLLW)					PROJECT DIMENSIONS		
NAME OF CHANNEL	LEFT OUTSIDE QUARTER	MIDDLE HALF OF CHANNEL	RIGHT OUTSIDE QUARTER	DATE OF SURVEY	WIDTH (FEET)	LENGTH (NAUT. MILES)	DEPTH MLLW (FEET)
ENTRANCE RANGE	39	39	39	9-03	---	1.9	47-37
ENTRANCE RANGE AND TURN	39	46	32	8-03	300-1050	0.5	37
INSIDE RANGE	38	38	38	8-03	300	0.6	37
COOS BAY RANGE	36	37	37	8,9-03	300	1.6	37
EMPIRE RANGE	36	37	38	9-03	300	1.3	37
LOWER JARVIS RANGE	38	37	35	9-03	300	0.8	37
JARVIS TURN	42	39	36	9-03	300	0.5	37
UPPER JARVIS RANGE	33	34	34	9-03	300-700	1.9	37
NORTH BEND LOWER RANGE	39	38	35	9-03	400	0.4	37
NORTH BEND RANGE	33	37	36	10-02,3-03	400	0.9	37
NORTH BEND UPPER RANGE	36	38	37	3-03	400	0.6	37
LOWER TURNING BASIN	37	38	38	3-03	400-900	0.3	37
FERNDALE LOWER RANGE	39	39	39	3-03	400	0.4	37
FERNDALE TURN	37	38	38	3-03	400	0.2	37
FERNDALE UPPER RANGE	35	37	38	3-03	400	0.7	37
MARSHFIELD RANGE	37	37	36	10-02,3-03	400	0.4	37
MARSHFIELD RANGE TO ISTHMUS SLOUGH	37	37	32	3-03	150-750	0.9	37
ISTHMUS SLOUGH	19	20	19	4-85	150	2.0	22

NOTE - CONSULT THE CORPS OF ENGINEERS FOR CHANGES SUBSEQUENT TO THE ABOVE INFORMATION

CHARTS AFFECTED BY NOTICE TO MARINERS
NM 33/02 THROUGH NM 1/04

Note: N indicates Not For Sale; P indicates Preliminary; T indicates Temporary;
* indicates New Edition/New Chart; ** indicates Chart Canceled

Chart No.	Ed. No.	Notice to Mariners No.
12	1	45/02
20	3	18/03
22	1	18/03
50	6	32*,34,40,50/03
53	2	34,50/03
70	4	7,34/03
71	4	7,34/03
72	4	7/03
73	4	34/03
101	3	48/02
103	5	16/03
108	9	35/02;34,39/03
120	6	39/03
124	10	18,34,39/03
125	7	21/03
126	39	21/03
145	16	39/03
200	3	37/03
301	1	14,21,24/03
302	1	2/03
310	20	2,14,21,24,52/03
400	3	33,35,45/02;29,33,34/03
401	5	33,35,45/02;14,29,33,34, 44/03
411	49	19*,22,23,24,25,26,29, 30,31,33,44,52/03;1/04
500	8	32*,34,41/03
501	12	9*,10,18,21,22,24,40, 41/03
502	2	52/02;40,44/03
503	4	1/04
507	2	45/02
508	2	45/02
510	3	40/03
513	6	38/02;34,50/03
520	127	38/02;34,40,41/03
521	11	34,50/03
523	8	34,50/03
524	12	47/02;34/03
525	3	40/03
526	10	47/02;6/03
530	30	37,38,40,52/02;6,10,18, 21,22,24,34,40,41,44, 50/03
531	21	47,52/02;21,24,32,34, 41/03
532	17	38/02;34,50/03
540	16	51/02;16,30/03
541	2	6/03
550	7	45/02;6/03
600	5	45/03
601	4	6,8,27,38/03
602	6	47/02;6,38/03
603	6	47/02;10/03
604	5	38/03
605	4	6/03
606	1	17/03
607	1	17,45/03
622	9	47/02;6/03
623	9	47/02;19,36/03
632	8	45/02
702	5	7/03
703	4	46/02;7,44/03
705	3	46,52/02
706	4	44/03
707	2	34,44/03
708	3	34,36/03
709	2	50/02;19,25/03
1113A		20*,21,22,25,52/03
1114A		39/02;4,9,11,12,13/03
1115A		1*,2,5,6,8,19,23,24,25, 26,27,29,30,34,35,37,38, 49,50,51,52/03;1/04
1116A		37*,38,45,46,49,50,51, 52/03;1/04
1117A		28*,30,31,32,34,35,36, 44,45,50,51/03
5161	13	48/03*
11004	7	37,39,40,42,43,45,47, 51/02;5,6,7,8,9,14,18,21, 22,23,24,25,26,27,29,30, 32,34,36,37,38,44,51/03; 1/04
11006	31	47*,49,50/03
11009	36	35,44,51/02;6,12,19,39, 52/03
11013	45	38*,40,50,52/03
11300	39	28*,30,31,32,34,35,36, 44,45,50,51/03
11301	23	37/02;16,24,32/03;1/04
11302	30	48/03*;1/04
11305	1	N36,N46/02;N1,N6,N7, N32/03;N1/04
11307	36	22,24,27,35,52/03;1/04
11308	22	3*,7,10,23,25,32/03
11309	37	48*,50/03;1/04
11310	1	N46/02;N22,N23, N32/03;N1/04
11311	23	46/02;26/03;1/04
11312	3	36,46/02;1,6,7,22,23, 32/03;1/04
11313	22	22,27,36,52/03
11314	22	17*,21,22,32/03
11315	31	48/03*
11316	39	17*,22,26,29,34/03;1/04
11317	29	37,40,49/02;16,19,20,21, 23,26,29,30,34/03;1/04
11318	1	N46/02;N6,N24,N25, N44,N50/03;N1/04
11319	31	17*,19,20,25,26,29,30, 34/03
11320	1	N22,N23,N24,N52/03
11321	29	39,40,41,45/02;23,31, 34/03
11322	28	19*,20,23,30,34,35,42, 47/03;1/04
11323	60	47*,49,51/03;1/04
11324	33	47*,49,52/03;1/04
11325	35	26*,38,42,47/03;1/04
11326	31	7*,9,16,20,21,22,23,24, 30,31,33,35,38,45,46, 52/03;1/04
11327	31	46*,52/03;1/04
11328	23	43*,52/03;1/04
11329	35	48*,49,52/03
11330	15	50*,51/03;1/04
11331	18	8,19,23,30,34/03
11332	28	42*,43,49,51/02;6,17,19, 20,23,25,31,34,35,37,47, 52/03;1/04
11333	1	N35/03
11340	68	37*,38,45,46,49,50,51, 52/03;1/04
11341	39	14*,17,21,22,23,25,31, 34,37,38,47,52/03;1/04
11342	52	27*,29,31,34,35,42,46, 47/03;1/04
11343	37	48*,49,50/03
11344	35	9*,19,22,23,26,27,29,31, 34,38,43,46,47/03
11345	31	9*,38/03
11347	33	42*,43,47,49/02;4,6,7,8, 19,20,21,23,25,26,27,29, 31,32,43,47,48,50,51/03
11348	20	43*,47,51/03
11349	40	38*,42,51/02;23,26,27, 31,36,52/03
11350	25	43/03*
11351	38	20*,22,23,25,27,30,31, 34,48,50,51,52/03;1/04
11352	36	3*,7,8,9,20,22,24,26,31, 34,48,51/03;1/04
11353	2	35,38,43,45,49/02;4,5,7, 18,20,21,26,27,31,34,43, 45/03;1/04
11354	24	26*,31,34,48,51/03;1/04
11355	25	38/03*
11356	35	38*,51,52/03
11357	36	38*,52/03
11358	52	41*,49,50,51/03
11359	11	39/02;49,50/03
11360	40	1*,2,5,6,8,19,23,24,25, 26,27,29,30,34,35,37,38, 49,50,51,52/03;1/04
11361	70	21*,23,24,25,26,30,31, 35,51,52/03;1/04
11362	4	N33,N36,N39,N40, N47/02;N2,N5,N6,N8, N19,N23,N24,N25,N26, N27,N29,N30,N34,N35, N37,N38,N49,N50,N51, N52/03;N1/04
11363	39	47*,50,51/03;1/04
11364	39	3*,4,5,8,9,18,19,21,23, 25,26,27,30,33,34,35,43, 50,51/03;1/04
11365	17	52/02*;9,32,34,50/03
11366	8	52/03*;1/04
11367	32	38*,45,46,51/03
11368	22	38/02*;19,21,23,30,33, 34,35,45,46,51,52/03
11369	44	9*,18,19,21,27,43,50/03; 1/04
11370	24	38/03*
11371	36	35*,48/03
11372	30	2*,7,8,10,19,23,24,26,27, 31,42,44/03
11373	43	48*,49/03;1/04
11374	31	45*,49,50/02;1,2,7,8,9, 19,20,23,24,26,27,29,34, 36,38,51/03;1/04
11375	35	1*,2,5,7,9,20,23,24,27, 29,47,51/03;1/04
11376	49	48*,49/03
11377	5	38*,44/03
11378	32	11*,12,18,20,21,22,24, 26,30,38,52/03
11382	39	46/02*;9,25,26,37,52/03
11383	50	52/03*
11384	33	30/03*
11385	25	49/03
11388	16	24,34/03
11389	32	33,37/02;2,7,32,42,51/03
11390	22	33,34,37/02;7,21,30,32, 50,51/03
11391	22	33,34/02;7,21,32,50/03
11392	6	34/02;21,32,50/03
11393	20	30,35,42/03
11400	34	39/02;4,9,11,12,13/03
11401	29	27/03
11402	21	30*,34/03
11404	21	50/02;9,19,27,49/03
11405	29	38/03*
11406	11	9/03
11408	28	3/03*
11409	28	32/03*
11411	14	43*,45/02;7,20/03
11412	41	42*,45/02;1,6,7,11,12,13, 14,20/03
11415	5	42*,45/02;1,2,7,14,20/03
11416	5	42,48/02;1,2,6,11,12,14, 20,50/03
11420	27	20*,21,22,25,52/03
11423	7	N39,N42/02;N4,N8,N15, N21,N22,N25,N52/03
11424	18	14,25/03
11425	34	46*,49/02;4,25,52/03
11426	36	38*,52/03
11427	33	2/03*
11428	32	52/02*;6/03
11429	21	47/02*
11430	25	17/03*
11434	25	41/03*
11435	13	N8,N15,N21,N22,N39, N52/03
11438	11	7,8,21/03
11439	25	6,7,15,22/03
11441	39	36/02;6,7,15,20,52/03
11442	34	38*,39,52/03
11445	30	7,15,39/03
11446	30	36/02;7,15,20,52/03
11447	35	38/02*;20,52/03
11448	14	7/03
11449	16	7/03
11450	8	15,22,25,39/03
11451	31	20*,22,25/03
11453	16	7/03
11460	38	36*,50/02;6,13,15,21,23, 25,31,34,39,40,52/03
11461	5	7,15,25,39,52/03
11462	24	22,25/03
11463	17	24/03*
11464	16	7,25/03
11465	36	52/02*;22,40/03
11466	36	30*,31,40/03
11467	37	47*,50/02;4,12,21,23, 40/03
11468	39	42*,43,49/02;40/03
11469	5	35,50/02;7,9,12,21,23,31, 40/03
11470	36	10*,12,40/03
11472	31	8*,25,40/03
11474	10	6,17,52/03
11475	16	51/02;13/03
11476	19	6,34/03
11478	20	32*,50,52/03
11479	4	N35,N50/02;N6,N23, N25,N31,N34,N40, N52/03
11480	38	30/03*
11481	4	42*,49/02;6,12,13,19,28, 34,50,52/03
11484	21	34/03
11485	33	22/03*
11486	15	36/03*
11488	24	7,17,50/03
11489	34	8*,12,20,22,31,50,52/03
11490	17	50/03
11491	33	34,37,38/02;12,30,34,50, 52/03
11493	9	N39/02;N12,N20,N22, N31/03
11494	8	N39/02;N22/03
11496	9	N35/02;N1,N17,N19, N34/03
11502	28	14,17,20,22,50,52/03
11503	39	38*,39,43/02;12,14,17, 20,22,31,50/03
11504	15	12,22/03
11505	1	34,40,49/02;1,4,5,11,22, 34,43,51/03
11506	40	10*,19,22,28,34,43,51, 52/03
11507	31	9*,12,20/03
11508	21	10/03*
11509	27	1,11,24/03
11510	18	34/02
11511	16	11/03
11512	59	10*,11,15,20,22,24,34, 43,51/03
11513	23	49/02;1,24,50/03
11514	26	37*,40,49/02;4,5,15,22, 24,34,43,51/03
11516	30	43*,50/03
11517	17	24/03
11518	33	14*,19,28,50/03
11519	12	28/03*
11520	41	38*,39,50/03;1/04
11521	26	35/02;9,19,24,28,34, 39/03
11522	19	39/03
11523	21	35,52/02;5,9,19,24,28, 34/03
11524	46	8*,11,12,13,15,17,19,20, 22,28,34,43/03
11525	6	N39,N40,N44,N46, N51/02;N4,N6,N8,N24, N39,N50/03;N1/04
11526	10	20/03*
11527	16	37/02;20/03
11531	21	11,39/03
11532	20	37/02;39,43,50/03
11534	32	17*,36,45,50/03
11535	12	46/02;39/03
11536	16	38/03*
11537	34	21*,23,26,35,36,43,45, 47/03
11539	18	39,44,51/02;6/03
11541	34	51/03*
11542	15	39/02
11543	22	39/02;8,38/03;1/04
11544	37	36/02*;8/03
11545	60	45*,47/02;6,8,14,22,23, 24,35,38,39,43,49/03; 1/04
11547	35	37,47/02;6,8,14,22,23,35, 38,39,43,49/03;1/04
11548	38	47/02*
11550	28	17/03*
11553	28	8/03*
11555	38	36/02*;7,24,50/03;1/04
12200	47	38*,42,52/02;7,12,18/03
12201	25	N42,N52/02;N7,N12, N18,N24,N32/03;N1/04
12204	35	10*,33/03
12205	28	43*,50/03
12206	30	50/03*

CHARTS AFFECTED BY NOTICE TO MARINERS
NM 33/02 THROUGH NM 1/04

Note: N indicates Not For Sale; P indicates Preliminary; T indicates Temporary;
* indicates New Edition/New Chart; ** indicates Chart Canceled

Chart No.	Ed. No.	Notice to Mariners No.
12207	20	50,52/02;18,50/03
12208	9	23*,28,41,50/03
12210	36	8*,33/03
12211	41	10/03*
12214	44	14*,19,52/03
12216	27	47/02*;19/03
12221	75	48*,50/03
12222	44	26*,28,33,34,41,51/03
12224	23	8*,33,45/03
12225	54	22*,33/03
12226	16	7/03
12228	29	43/02*
12230	60	30*,34,42,48,52/03
12231	26	35,46/02;7,30/03
12233	35	3*,4,5,6,14,34,45/03
12235	29	47/02;4,6,7,17,33/03
12237	27	48/03*
12238	37	46/02*;1,4,7,19,25,34/03
12241	21	34,44/02;7,34/03
12245	62	30*,33,34,49/03
12248	40	44/03*
12251	23	35/02;4,6,7,15,26/03
12252	23	33,34/02;4,7,10,15,17,30, 35,45,49/03
12253	43	35/03*
12254	43	38*,43,44/02;30,34/03
12255	15	44/02;30,34/03
12256	14	48/03*
12261	28	37*,44/02;7,18,22,48/03
12263	52	35*,42,44/03
12264	28	38/02*;7,42,44,48,52/03
12266	27	20,30/03
12270	32	9*,18,24,25,33,42/03
12272	29	36,45/02;13,16,30,33, 38/03
12273	54	47/03*
12274	33	37*,50/02;5,15,17,30, 33/03
12277	32	35*,51/03
12278	72	36,45/02;19,25,30,33, 38/03
12280	4	52/03*
12281	49	12,19,25,38,44,48,49/03; 1/04
12282	34	43/03*
12283	24	8,18,25/03
12284	15	7,42,48/03
12285	35	11*,14,19,22,34,36,45/03
12286	29	2*,4,6,42,52/03
12289	48	10*,19,22/03
12300	43	19*,39,44,48,49/03
12301	21	N37,N39,N42,N45/02; N5,N17,N39,N44,N48, N49/03
12304	43	21*,26,48,52/03
12311	42	38*,48,51/03;1/04
12312	52	10*,15,24,32,51/03;1/04
12313	49	35*,43,52/03
12314	30	46*,50/02;5,25,33,35/03
12316	29	2*,6,32/03
12317	31	37,50/02
12318	41	9*,32,44/03
12323	23	40/02;4/03
12324	30	2*,8,49/03
12326	49	35*,49/03
12327	97	48*,49/03
12331	30	8*,13,14,18,33/03
12332	21	43,46/02;13,18/03
12333	33	44*,49/03
12334	66	30*,34,36/03
12335	40	47/03*
12337	22	45/02;13,18/03
12338	9	21/03*
12339	44	50/03*
12341	26	36/03*
12343	18	37/02*;7,21,27/03
12345	10	42/02*;21/03
12347	29	27,29,35/03
12348	33	27,29,34/03
12350	57	39*,49/02;29/03
12352	30	46/03*
12353	17	39/03
12354	40	38/03*
12358	19	46*,49/02;1,7,10/03
12362	16	49/02
12363	39	44/02;6,23,27,32,36/03
12364	34	20*,23,25,27,32,36,39/03
12365	26	6,23/03
12366	27	51/02;20,27/03
12368	26	42/02*;24,25/03
12369	25	44/02;32,35,36,43/03
12370	18	39/02*
12371	23	27*,52/03
12372	31	45*,47,48/02;2,5,6,23,25, 36,45,49,52/03
12373	14	2/03
12377	14	37/02
12378	14	2,13,23/03
12401	7	47/02;2,13,33,41/03
12402	8	33,47/02;13,34,41/03
13000		N48,N49/02;N21,N26, N29/03
13003	47	36*,39,44,45,48,52/03
13006	31	36*,39,44,45,48/03
13009	30	42*,48,49/02;1,9,18,23, 36,39,44,45,48/03
13200	33	37,48/02;7,9,18,36,39,44, 45,48/03
13201	10	N37,N48/02;N9,N18, N36,N39,N44,N45, N48/03
13203	12	37/02;48/03
13204	12	44/03
13205	36	37,42,45,48/02;1,5,23/03
13209	23	37/02;23/03
13211	13	47/02;45/03
13212	35	9*,13,36/03
13213	40	14*,25,36/03
13214	27	34*,45,48/02;5/03
13215	17	45,48/02;1,5/03
13216	1	N48/02
13218	38	42,45,51/02;5,46,50, 52/03
13221	53	44,51/02;2,5,7,27,46, 49/03
13223	36	52/02;2,46/03
13224	36	44/02;5,27/03
13226	5	44/02;6,7,49/03
13227	13	7,49/03
13228	11	51,52/02
13229	27	39,42,45,52/02;1,7,19,48, 50,52/03;1/04
13230	46	2*,7,19,50,52/03;1/04
13232	4	39,42/02
13233	16	10,39/03
13235	5	48/03
13236	29	45/02;1,7,19,50/03;1/04
13237	39	27*,39/03
13241	15	34,42/02
13244	39	48/02;7,32/03
13246	37	36*,42/03
13249	12	22/03*
13253	18	3*,8/03
13260	39	36*,39,42,45/03
13263	7	N36,N43,N48,N49/02; N1,N7,N9,N18,NP21, N23,N26,N29,N36,N39, N42,N45/03
13264	103	36,49/02;9,P21,26,29,39, 42,49/03
13267	31	47/03*
13270	60	50/03*
13272	47	40/02;8,25,35/03
13274	25	43/03*
13275	28	45/03*
13276	22	36/03*
13278	25	1,9,32,39/03
13279	30	20*,32,39/03
13282	11	21*,39/03
13283	18	1,9/03
13285	10	20/03
13286	29	39*,40,50/02;1,9/03
13288	40	36,43,50,51/02;29,42,44, 45/03
13290	35	39*,42,44,49/03
13292	36	36,40/02;7,16,29,42,44, 49/03
13293	33	43,51/02;14,27/03
13295	11	2*,14/03
13296	25	43/02;27/03
13298	10	43,52/02
13301	20	33,51/02;23,42,45/03
13302	21	41/02;2,7,9,32,42,45, 52/03
13303	12	48/02*;7,9/03
13305	28	40,41,49/02;2,7,9,36, 44/03
13307	10	23,28,44/03
13308	11	40/02
13309	28	42/02*;9,32,52/03
13312	21	10/03*
13313	19	41,49,52/02;6,9,36/03
13315	11	49/02
13316	22	28/03*
13318	18	38*,41,52/02;5,6,21/03
13321	9	20/03*
13323	7	5/03
13324	13	41,52/02;2/03
13325	14	2,29/03
13326	12	41,43/02
13392	2	6/03
13394	3	39/02*;9,21,42/03
13396	4	9,19,21/03
13398	3	36/02
14002	57	32,34,36,37,42,49/03
14003	6	48,49/02;5,9,12,29,39, 48/03
14007		N38/03*
14008	76	38/03**
14010	5	35/02;26,32/03
14014	82	1/04
14024	5	33,36,39/02;12,22,36, 47/03
14040	65	40/02;34,49/03
14041	12	34,36,42/03
14042	3	34,42/03
14043	7	21,26,49/03
14044	44	6,47,49/03;1/04
14046	2	47,49/03
14061	27	6,9/03
14062	17	32,36/03;1/04
14066	19	6,34,42,47/03
14067	11	6/03
14081	21	36,47/03
14083	30	33/02
14085	6	49/03
14087	58	33/02
14088	10	41/02*;34/03
14089	29	41/02*;34/03
14090	2	33/02
14091	6	41/02*
14105	19	47/03
14110	42	32,44/03;1/04
14111	7	14,32,34,42,44/03
14112	5	32,42,44/03;1/04
14115	2	47/03
14136	2	1/04
14141	17	47/03
14143		N38/03*
14144	29	38/03**
14145	2	47/03
14146	2	32,49/03
14151	2	37/02;32,34,38/03;1/04
14168		N37/03
14169	2	32,38,42,49/03
14173	2	38/03
14174		N42/03*
14175		N43/03*
14176		N38/03*
14177		N40/03*
14178		N40/03*
14180	38	42/03**
14181	3	43/03**
14183	15	38/03**
14184		N32,N44,N47,N49/03
14185	2	40/03**
14186	2	40/03**
14187	2	38/03**
14188	1	42/03
14189	2	36,42,44/03
14190	2	37,42/03
14191		N38/03*
14192		N38/03*
14193		N38/03*
14195		N42/03*
14196		N38/03*
14197		N38/03*
14198		N43/03*
14200	2	38/03**
14201	15	38/03**
14203	12	42/03**
14204	21	38/03**
14205	7	38/03**
14206	20	43/03**
14208	28	38/03**
14209		N38/03*
14211		N40/03*
14212		N38/03*
14213		N39/03*
14214		N39/03*
14215		N39/03*
14216		N39*,N44/03
14217		N43/03*
14218		N39/03*
14219		N40/03*
14220		N39/03*
14221	26	40,46/02
14222	16	40/03**
14223	18	38/03**
14224		N39/03*
14225	17	39/03**
14226	32	39/03**
14227	28	39/03**
14228	11	39/03**
14229		N39/03*
14240	6	43/03**
14241	23	39/03**
14242	13	40/03**
14243	8	39/03**
14244	5	39/03**
14245	4	39/03**
14246	6	39/03**
14247		N39/03*
14248		N40/03*
14249		N39/03*
14250		N40/03*
14251		N40/03*
14252		N40/03*
14253		N40/03*
14254		N40/03*
14259	3	40/03**
14260	47	39/03**
14263	15	40/03**
14264	4	40/03**
14280	37	40/03**
14310	2	40/03**
14328	6	47/03
14329	5	32,47,49/03;1/04
14340	25	33,37,40,52/02;12,22,30, 49/03;1/04
14341	5	12,34,47,49/03
14342	20	52/02;30,49/03
14344	2	37,40/02;49/03
14345	5	37,40/02;12,22,49/03
14349	7	42,47/03
14353	3	42/03
14354	2	32,42,50/03
14355	3	50/03
14357		N52/02;N49/03
14358		N36/02;N34,N47/03; N1/04
14360	36	33,36/02;47/03
14373	2	34,49/03;1/04
14380	19	49/03
14386	3	36/02
14404	4	47/03
14415	4	33/02;36/03
14420	27	40/03**
14500	27	52/02*
14756		N50/03
14758		N32,N49/03
14773	16	26/03
14774	16	15/03
14782	24	47/03
14784	19	47/03
14786	13	49/03
14803	26	5,49/03
14804	24	5/03
14813	21	2*,49/03
14815	22	43/03
14816	23	5/03
14820	19	11/03*
14822	31	10/03*
14823	30	1/03*
14826	27	4*,49/03
14829	5	49/03
14830	30	31*,34,47/03
14832	34	52/02*;49,51/03

CHARTS AFFECTED BY NOTICE TO MARINERS
NM 33/02 THROUGH NM 1/04

Note: N indicates Not For Sale; P indicates Preliminary; T indicates Temporary;
* indicates New Edition/New Chart; ** indicates Chart Canceled

Chart No.	Ed. No.	Notice to Mariners No.
14833	25	43,49,51/03
14835	31	39/02
14836	27	42/02*
14837	27	3/03
14838	3	52/02*
14839	36	9*,43,49,51/03
14842	13	46*,51/03
14843	22	39,51/02;43,51/03
14844	31	4,51/03
14845	26	4,51/03
14846	11	39,40/02;2,43,47/03
14847	30	40/02;43,47/03
14848	56	9,17,21,22/03
14850	51	7,21/03
14852	45	19*,21/03
14853	14	26/03*
14854	13	17/03
14864	26	37/02;1/04
14865	16	4/03
14867	26	39/03*
14871	2	34/03
14873	2	35/02
14880	30	33/02;4/03
14881	31	33/02
14885	20	51/02
14886	11	41/03*
14901	14	52/02*;5/03
14902	28	4/03
14903	23	31/03*
14904	26	40/03*;1/04
14905	30	45/03*
14906	23	5/03
14909	19	49/03
14910	23	17/03*
14911	20	4/03
14912	17	31/03*
14913	18	31/03*
14915	25	28/03*
14916	10	45/02*;17/03;1/04
14917	23	3/03
14918	26	17/03;1/04
14919	27	1/04
14922	19	51/02;9/03
14924	27	5,49/03
14926	10	32*,47/03
14927	24	35,37/02;47/03
14928	21	4/03*
14929	24	14/03*
14930	24	45/02;1/04
14931	24	35/02*
14932	23	26/03*;1/04
14933	24	35*,37/02;1/04
14934	27	17*,26/03;1/04
14935	21	1/04
14937	24	52/02*;2,17/03
14938	23	1/04
14942	25	35/02;1/04
14961	11	47,49/03
14963	20	51/02
14965	21	11/03*
14966	25	14*,21,49/03
14967	22	5/03
14970	25	40,46,51/02;1/04
14972	25	1/04
14973	27	15/03*
14975	33	52/02*;43,49/03
14983	9	46/03*
14985	9	41/03*
14986	9	46/03*
14988	10	41/03*
14995	11	52/02*
15043	3	34,47/03
15044	3	34,47/03;1/04
15046	4	47/03
15061	3	50/03
15064	1	50/03
15066	5	32,47/03
15067	2	47,49/03
15069	4	47/03
15070	3	49/03
15080	1	47/03
15160	5	50/03
15163	2	50/03
15313	1	15/03
15562		N41/02;N16/03
15569		N23/03
15570		N23/03
15585		N14/03
15690		N35/03
15880		N41/02
15946		N47/03
15954		N47/02*
16003	16	13,36,48/03
16004	11	13,17,48/03
16005	9	36,48/03
16006	33	6,32,35,36/03;1/04
16011	35	38/02;8,29,31,32,35,44, 50/03;1/04
16012	21	38/02;34,50/03
16013	28	52/02;21,29,32,34,35,41, 44/03
16016	19	34/03
16041	8	48/03
16042	7	39/02*
16061	8	37,49/02;13,17/03
16067	7	1/04
16081	6	1/04
16082	6	1/04
16083	5	1/04
16200	13	36/03
16206	7	46/03
16220	5	36/03
16300	8	52/02;3,8/03
16305	9	8/03;1/04
16315	10	1/04
16322	7	8,46/03;1/04
16338	3	1/04
16343	7	1/04
16363	12	38/02*
16381	8	8,25/03
16420	10	46/03*
16423	2	47/03
16431	7	50/03*
16440	13	37/02
16441	7	37/02
16442	7	41/03*
16480	10	38/02;34,50/03
16500	9	9,33/03
16520	21	2,31,33/03
16528	16	9,33/03
16529	14	50/02;9,33/03
16530	6	50/02;33/03
16535	12	2,21,31/03
16549	15	41/03*
16553	3	17/03
16556	4	8/03*
16561	1	29,35,44/03
16566	10	29,44,49/03
16568	12	39/02*
16575	1	39/02;1/04
16576	4	47/03*
16580	11	39/02;1/04
16590	10	38/02*;1/04
16591	8	1/04
16592	9	16/03;1/04
16593	11	14/03*;1/04
16594	13	2/03;1/04
16595	14	2/03;1/04
16596	12	39/02*;1/04
16597	8	43/02;1/04
16598	9	43/02;1/04
16599	6	43/02;1/04
16601	10	1/04
16603	8	48/03*
16604	11	1/04
16605	8	1/04
16606	11	37/02*;21/03;1/04
16608	4	46/03*
16640	24	21/03;1/04
16645	18	1/04
16646	12	8/03;1/04
16647	3	1/04
16648	4	1/04
16660	28	42/02;6,16,47,49/03
16663	6	42/02;6,16,47,49/03
16665	7	42/02;6,16,47,49/03
16680	10	6,32,37/03
16681	10	37/02*
16682	15	8*,17,19,37/03
16683	9	3,6,17,32,37/03
16700	28	40*,43,50/03
16701	19	37/03*
16702	11	37/03*
16705	19	49/02;16,43/03
16707	10	34,37/02;16,20/03
16708	25	37,49/02;16,20,50/03
16709	22	49/02
16712	1	16/03
16713	2	49/02
16741	9	46/02
16760	10	51/02;28/03
16761	16	28/03
17003	4	47,52/02;24,35,36/03
17005	10	41,45,47,52/02;24,34,35, 43/03
17008	12	43/02;36/03
17300	30	52/02*;21,39/03
17302	18	51/02;49/03
17303	9	37/02
17315	23	2*,16,21,25/03
17316	20	3,25/03
17318	5	39/03
17320	15	13,29,34,39/03
17323	10	13,22,29,39/03
17324	13	39/03
17325	7	29/03
17327	21	46/03*
17360	33	31*,36/03
17372	11	48/03*
17375	20	50/03
17382	15	20*,36/03
17383	1	49/02;8/03
17384	7	44/02
17385	14	14/03*
17400	16	36/02;10,12,44/03
17401	10	1,36/03
17402	10	46/02*
17405	14	12,25,46/03
17406	6	25/03
17409	10	39/02*;44/03
17412	2	49/03
17413	2	43,50/02;10,44/03
17414	3	41/02
17416	3	10,14/03
17420	26	36,37,42,43,50/02;1,10, 12,14,20,36/03
17422	8	52/02*
17426	13	37/02;1,16,20/03
17427	7	21,36/03
17428	7	5,36,43/03
17429	2	N38/02*
17430	10	5,36/03
17434	11	5,36,43/03
17435	16	40,49/03
17436	6	20/03
17437	8	21/03
17438	12	50/02;10,14,15,21,36/03
17441	7	10,15/03
17443	12	10/03
17445	2	10,14,36/03
17446		N10/03
17460		N5,N36,N49/03
17465	4	6,12/03
17470		N23,N41/03
17471		N6,N47/03*
17472	4	5,14,36,41/03
17480	4	43/02;5,10,36/03
17482		N7,N14,N41/03
17483		N41/03
17484	3	41/03
17485	4	41/03
17489	19	43/02
17495	2	43/02
17503	4	43/02
17513		N42,N43/02;N15/03
17515	7	6,15,16,36,43/03
17517	8	6,15,16,34/03
17518	7	P44,48/02;16,18,20,41, 47/03
17519	13	16/03
17520	2	N6,N16,N34/03
17521		N15/03
17522		N15/03
17523		N15/03
17524		N12,N15,N49/03
17525		N15,N43/03
17526		N15/03
17528		N43/02;N6,N12/03
17541	3	43/02
17542	6	47/02
17543	17	41/02;43/03
17545	13	43,47/02;43/03
17546	22	42,43,47/02;24,34,35, 43/03
17548	28	16,43/03
17549	6	47/02;15/03
17550	4	42,43,P44,45,47,48, 52/02;43/03
18000	8	45/02;6,10,21,36,44/03
18002	6	N45/02;N2,N6,N10,N21, N36,N44/03
18003	19	22*,41,43/03
18005	4	N34/02;N6,N10,N13, N21,N26,N40/03
18006	3	N6/03
18007	31	33,34,37,38,39,40,47, 52/02;18,22,24,26,35, 41/03
18008	7	N33,N34,N37,N38,N39, N40,N47,N52/02;N18, N22,N24,N26,N35,N37, N41/03
18009	2	N34/02;N6,N13,N26, N40/03
18010	20	33,34,37,38,39,40/02;6, 13,26,33,40,47/03
18020	37	47/03*;1/04
18022	33	34,37,45/02;6,10,13,21, 25,33,35,36,40,43/03; 1/04
18400	44	41*,43,47,49/03
18401	12	34/03
18403	21	6,20/03
18405	12	43/02;16/03
18406	5	16/03
18409	8	41/03
18411		N16,N20/03
18412	10	20/03
18413	15	20,22/03
18414	9	20/03
18415	8	42/02;7,22,32,39,47, 50/03
18416	6	P44,48/02;22,46/03
18418	6	15/03
18419	11	47/02;12,46/03;1/04
18420	1	22,47,49,50/03
18421	46	50/03*
18423	33	1*,5,7,9,15,18,30,32,34, 36,38,39,43,45,47,49/03
18424	25	7,45/03
18427	21	35/02*;7,19,45/03
18429	9	3*,22/03
18430	7	6,7,22,49/03
18431	6	2/03*;1/04
18432	5	14/03*
18433	5	2*,22,32,36/03
18434	4	P44,48/02;6,9/03
18440	26	3*,15,18,22,28,30,32,34, 38,45,47,51/03
18441	43	39*,45,47,51/03
18443	15	39/02;6,34/03
18444	15	39/02;34/03;1/04
18445	29	33,39/02;6,7,9,10,15,18, 22,25,28,34,36,38,42,45, 47,51/03;1/04
18446	16	47*,51/03
18447	26	52/02;6,7,10,18,47/03
18448	33	1/04*
18449	18	50*,51/03
18450	17	9*,44/03
18452	16	34,38/03
18453	24	14*,25,36,38,42/03
18455	2	N39/02;N15,N34,N38/03
18458	15	19*,28,34,38/03
18459	5	N39/02;N9,N15,N28, N34,N38/03
18460	11	2*,6,7,43/03
18464	23	24*,30/03
18465	35	2*,15,30/03
18468	17	7/03
18471	9	36/03*
18473	7	4*,18,19,34,38,45,47, 51/03
18474	7	45/02*;7,10,15,22,25,34, 36,38,45,51/03
18475	1	35/03
18476	4	39/02;7,9,28,34,38/03
18477	5	7/03

CHARTS AFFECTED BY NOTICE TO MARINERS
NM 33/02 THROUGH NM 1/04

Note: N indicates Not For Sale; P indicates Preliminary; T indicates Temporary;
* indicates New Edition/New Chart; ** indicates Chart Canceled

Chart No.	Ed. No.	Notice to Mariners No.
18480	29	2*,6,7,43/03
18484	10	40/02;15,29/03
18485	15	2*,10,29/03
18500	28	39/02;12,22,28/03
18502	84	39,42,49/02;9,21,28,29, 42,47,52/03
18504	65	19*,35/03
18520	24	33,39/02;22/03
18521	69	34*,39,49/02;4,10,12,21, 22,24,29,52/03
18523	53	33/02;4,12,52/03
18524	33	33/02;4,6,10,24,29,47, 52/03
18525	33	33/02;4,9,29,52/03
18526	55	33/02;4,18,29,52/03
18527	21	48/03
18528	10	52/02*;18/03
18529	10	52/02*
18531	20	34/02;9,10,48,52/03
18532	20	10,52/03
18545	15	50/03*
18548	5	8/03*
18558	37	39/02;48/03;1/04
18561	11	33,39/02;10,51/03
18580	21	33,38,39/02;51/03
18581	17	49/02*;4,36,50,51/03
18583	38	33,42,49/02;12,43/03
18584	47	39,49/02;4,6,30,48, 52/03;1/04
18587	68	33,39,42/02;4,6,9,10,21, 27,36,52/03;1/04
18588	37	22*,36/03
18589	15	44/03
18600	14	33,37,38,40/02;44,47/03
18601	13	10/03;1/04
18602	12	26*,47/03;1/04
18603	16	9*,10/03
18620	23	35/02*
18622	52	49/02;21,25,27,35/03
18623	11	34/02
18626	15	37/02;10/03
18640	24	26,38,42/03
18643	17	26*,33,41,43/03
18645	24	50/02;33,38/03
18647	15	2/03*
18649	63	48*,50/03
18650	52	47/03*
18651	42	15*,48/03
18652	32	36*,40,43,46,48,49/03
18653	9	36,38,41/02;4,6,21,43, 50/03
18654	42	38,49/02;12,16,35,46, 48/03
18655	58	49/02;12,16/03
18656	53	19*,21,33,40,43,48/03
18657	18	4,21,40/03
18658	29	4,21,33,40/03
18659	14	49/02;7,16,21,43,48/03
18660	2	29*,43,49/03
18661	27	15*,16,43,49/03
18662	20	7,43,44/03
18663	5	14*,43/03
18666	1	21,33,48/03
18680	30	6,13,33,35,38,40/03
18685	32	36*,46/03
18687	13	8/03*
18700	22	40/03*
18703	25	40/03*
18704	12	37/02
18720	31	35/02;4,6,10,12,25/03
18721	11	35/02;6,10,39/03
18723	3	6/03
18724	1	22*,25/03
18725	27	32/03*
18740	40	46*,49/03;1/04
18741	18	N45,N50/02;N12,N27, N38/03;N1/04
18744	30	37/02;35/03
18746	34	34/02;5,13,41,49/03
18749	38	40/02;5,6,16,21,26,28,31, 39,41,49,50/03
18751	42	40/02;5,6,16,21,26,28,31, 39,46,49,50/03
18754	17	39*,43/03
18757	10	13,41/03
18758	6	35/02*;16,33,49/03
18760	6	N34,N35,N45,N50/02; N6,N25,N35,N36, N44/03;N1/04
18761	2	N1/04
18762	15	1/04
18763	9	1/04
18765	15	45,50/02;12,27,46/03
18766	7	45,50/02;12,27,36/03
18768	4	N45,N50/02;N12,N27, N36,N38/03
18769	2	N1/04
18772	47	21*,48/03
18773	39	40*,41/03
18774	10	35/02*;10,16,49/03
18775	2	N1/04
19002	9	N37,N51/02;N16,N23, N29,N46/03
19004	36	35,37,51/02;23,29,30, 46/03
19007	16	51/02;16,23,29,30,46/03
19008	4	16,23,29,46/03
19009	4	16,23,29,46/03
19010	17	45*,51/02;23,29/03
19013	16	51/02;29,30,46/03
19016	9	46/03
19019	9	28/03*
19320	16	35,37,51/02;5,16,23/03
19324	22	35/02;5,23/03
19327	10	23,43/03
19330	9	27/03
19331	7	23,43/03
19339	1	N35,N49,N51/02;N5, N13,N30,N47/03
19340	26	35,49,51/02;5,13,29,30, 36,47/03
19347	17	29/03
19348	7	29,43/03
19353	12	27/03
19357	22	42*,49,51/02;5,13,30,36, 47,50/03
19359	10	12,16,47/03
19360	1	N37,N51/02
19361	7	30/03
19362	12	49/02
19366	36	49/02;5,50/03
19367	37	49/02;10,50/03
19369	5	49/02;10,36,50/03
19379	1	N51/02;N5,N13,N30, N46/03
19380	14	51/02;5,13,30,46/03
19381	8	49,51/02;26/03
19382	15	26/03
19383	17	49/02;5/03
19387	9	N46/03
19388	2	N46/03
19401	8	10/03*
19402	6	9/03*
19421	7	8/03*
19441	7	28/03*
19442	5	14*,26/03
19461	7	10/03*
19483	6	11/03*
21005	5	45/02;2/03
21008	62	39,42,43,50/02;1,2,36/03
21011	5	2/03
21014	72	42,50,52/02;2,3,4/03
21017	50	41,50/02;4,5,6,9/03
21020	42	41/02;5,6,7/03
21021	3	45/02;13/03
21023	41	34/02;7,8,9/03
21033	46	1,16/03;1/04
21036	7	1,16/03;1/04
21120	27	47,50,51,52/02
21121	18	47/02
21122	5	47/02
21125	13	51,52/02;36/03
21126	1	50/02
21140	1	45,50/02;12,27,36/03
21141	23	48/02
21160	1	45/02
21161	19	43,48/02
21180	1	2,7/03
21182	34	39/02
21200	1	2/03
21301	13	3,12/03
21342	28	41,44/02
21384	3	6/03
21401	20	7/03
21441	27	34,44/02
21478	3	9,16/03
21482	1	36,46/03
21510	1	9,16/03
21520	1	29/03
21521	14	29/03
21525	19	38/03
21563	3	45/02
21580	40	52/03
21581	5	41/03
21584	2	41/03
21601	4	31/03
21603	9	5,31,36/03
21605	7	31/03
21661	12	6/03
22004	38	34,36,39,41,43,52/02;16, 29/03
22008	35	34,36,39,41,43,44,48, 52/02;6,14,17,29,32,38, 47/03
22012	31	34/02;6,29,32/03
22032	20	19,40/03
22036	28	47/02;51/03
22050	4	12,26/03
22052	6	46/02;25,34,43,47/03
22082	4	13,25,38/03
22084	4	42/02;35,37/03
22090	2	43/02;4,17/03
22100	3	12/03
22101	19	43/02;37/03
22102	19	17/03
22109	3	17/03
22111	4	17/03
22112	3	43/02;17,37/03
22113	8	12,17/03
22114	5	42,43/02;17,33,37/03
22117	3	37/03
22120	3	34,36,39,41,43,52/02;29, 32/03
22121	9	34,36,44,52/02;29,32,47, 51/03
22124	2	34,52/02;6,29,32/03
22125	1	36/02
22126	1	36/02
22130	2	44/02;14,17,29,32,38/03
22138	2	41,44,48/02;6/03
22140	2	34,36,44/02;25,47/03
22142	2	39,41,43/02;25,40,47/03
22143	4	26*,29/03
22145	2	N41/02;N25/03
22160	2	34,39,41,48,52/02;25/03
22170	3	39/02;6/03
22172	8	48/02*;4,6,29/03
22173	36	48/02*;6,17,29/03
22180	2	34/02;32/03
22181	16	39,41/02;29/03
22182	6	34/02;14,29/03
22183	4	52/03*
22190	2	29/03
22205	2	12,18/03
22221	20	12,31,34/03;1/04
22222	1	4,12,31/03;1/04
22225	2	12,18,40/03
22233	29	13,18,25,37/03
22234	1	1/04
22250	2	42/02;12,18/03
22251	11	12,28/03
22259	4	20,24/03
22263	1	26,37/03
22264	2	42/02;13,18,20,24,26,37, 41/03
22275	3	42/02;12,18,26/03
22281	9	12,18/03
22282	17	12/03
22283	3	N12/03
22284	7	N10,N38/03
22290	4	18,30/03
22293	15	18,26,37,38/03
22294	15	12/03
22305	2	18,24,30,34/03
22311	19	8/03
22312	2	13,30/03
22313	2	44/02;8,18,38,40/03
22314	1	44/02;40/03
22322	11	33/03**
22331	2	N10,N19,N24/03;N1/04
22335	4	19,52/03
22341	9	43/02;11,21,29,52/03
22342	9	21,29/03
22343	1	N43/02;N10,N11,N21, N41,N52/03
22344	6	N23*,N52/03
22345	11	42/02;24/03
22347	6	N23/03*
22351	1	N43/02;N12,N35,N41, N52/03
22352	6	12,19,24,35,52/03;1/04
22360	2	19,52/03
22361	2	N10,N30,N32,N33,N34, N52/03
22370	2	15,19,26,30,33,34/03
22371	5	30,32,33,52/03
22373	1	N50/02;N10,N24,N30, N32,N33,N34/03
22375		N10,N15,N26,N37/03
22377	1	N10,N13/03
22379	1	N50/02;N10,N30,N32/03
22381		N43/02
22395	2	42/02;15,19,22,26,30/03
22401	4	N23*,N30/03
22403	1	N45/02
22404	15	46/02
22406	1	N1/03
22407	1	N4,N11,N18,N30/03
22408	1	N10,N21/03
22409	4	N45/02;N10,N17,N22/03
22410	32	43,44,46/02;19,23,40/03
22413		N45/02;N22/03
22417	1	N10,N25/03;N1/04
22418	2	36,44,46/02;19/03
22420	2	4,11,15,19,30,40/03
22421	4	N43,N44,N46/02;N11, N23,N25,N26,N27/03
22423	3	N11,N25,N27/03
22424		N27/03
22425	2	44,46/02
22427	1	N43,N44,N46,N50/02; N11,N23,N25,N26, N40/03
22429		N46/02;N10,N14,N17, N19,N27/03
22430	6	19/03
22433	3	39,47/02;11,14,35/03
22434	2	35/03
22436	2	39/02;10,14/03
22440	1	19/03
22471	31	44/02
22481	35	43,44/02;19/03
22482	16	44,50/02;23/03
22492	3	34/03
22521	3	12,17,34/03
22523	3	12,17,34/03
22529	3	12,17,35/03
22531	2	12,17,35/03
23000	5	51/03
23010	4	38/02
23020	4	22/03
23030	6	38/02;21,22,37,42/03
23121	7	17,20/03
23122	8	33/02
23124	3	N17,N20/03
23125	4	17/03
23131	7	12,22/03
23141	7	34/02;22,37/03
23142	10	8,37,47/03
23145	3	37,51/03
23150	10	37,52/02
23151	3	12/03
23152	3	37/02;12/03
23153	8	12,13,49/03
24004	36	41,42,46/03
24016	53	39/02
24024	46	18,25/03
24028	6	48/02
24050	11	34,38,49/02;20,31,32,33, 51,52/03
24052	15	37,38/02;14,19,21,30,42, 44,50/03
24053	16	19/03
24055	6	37,49/02;14,19,21,42,50, 51,52/03
24057	4	38,49/02;20,30,33,42, 52/03

CHARTS AFFECTED BY NOTICE TO MARINERS
NM 33/02 THROUGH NM 1/04

Note: N indicates Not For Sale; P indicates Preliminary; T indicates Temporary;
* indicates New Edition/New Chart; ** indicates Chart Canceled

Chart No.	Ed. No.	Notice to Mariners No.
24058	2	37,38/02;19,22,28,29,30, 42,44/03
24060	2	34/02;17,32/03
24080	5	17/03
24091	6	6,21,46/03
24092	14	6/03
24100	5	46/03
24101	3	37,41/02
24102	3	37,41/02
24110	3	35/03
24130	14	5/03
24133	6	31/03
24140	18	41,42,46/03
24141	4	5/03
24142	43	5,6/03
24149	1	52/03
24150	27	41,47/03
24151	4	41/03
24152	2	41,47/03
24153	6	39,47/03
24155	6	46,49/03
24160	21	47/03
24161	11	42/02;7,28,32,39,40, 47/03
24162	9	42/02;6,7,28,32,39,40,42, 47,52/03
24164	6	39,41,47/03
24170	14	5,6,35/03
24171	19	5,6,37,52/03
24172	4	5,6/03
24180	15	8,40/03
24201	5	49/03
24202	6	31,35,46/03
24203	36	49/03
24210	14	42/03
24220	14	39/03
24222	3	39/03
24223	33	39/03
24230	20	52/03
24233	15	36,43/02
24234	3	35/03
24240	5	39/02;7,39,46,52/03
24250	5	39/02;7,39/03
24251	23	34,43/02;6,39/03
24252	5	39,43/02;6,39/03
24260	5	34/02
24270	3	17,29/03
24271	14	17,29/03
24274	2	17,29/03
24290	3	36,43/02
24291	4	36/02
24292	4	36/02
24293	6	36/02;37,42,46/03
24294	22	36/02;37,46/03
24320	4	34,43/02;6,17/03
24321	3	6/03
24322	6	34/02;6,17/03
24350	2	51/02;18/03
24355	2	51/02;25,37/03
24360	1	25/03
24370	1	34/02;48/03;1/04
24375	2	34/02;38/03
24376	1	38/03
24380	2	35/02;48/03;1/04
24388	2	35/02
24404	8	35,44,48/02
24405	10	35,36,44,48/02
24406	30	2/03
24408	21	36,44,48/02
24410	2	44/02
24430	5	39/02;8,11,31,52/03
24431	14	39/02;31,52/03
24433	3	52/03
24434	4	39/02;52/03
24450	3	26,47/03
24453	5	26/03
24454	5	5,26/03
24460	4	39,47/02;15,29,32,47/03
24461	4	16,38,47/03
24462	5	47/02;16,29/03
24463	6	39/02;12,15,25,26,38/03
24465	6	33,47/02;38/03
24469	1	46,47/02;13/03
24470	4	39,47/02
24471	8	47/02
24480	1	41,44,45,49/02;24,27,42, 48/03
24482	2	49/02;31/03
24483	2	49/02
24484	3	49/02;31/03
24490	3	25,27/03
24491	3	27/03
24492	20	46/02
24501	3	27/03
24502	6	46/02;27,34,47/03
24504	7	41,45,46/02;42,48/03
24508	3	22/03*
24509	2	45,50/02;15,25,34,42/03
24510	2	41,45,46,50/02;42/03
24511	2	24,42,48/03
24512	3	44,46/02;24,25,38,42/03
24513	18	46/02;38,42/03
24517	2	46,49/02;25,40,42/03
25001	7	15,52/03
25017	5	15,25,31,34,39,52/03
25018	9	15,25,31,34,39,52/03
25400	1	35,48/02
25480	1	42,46/02;52/03
25485	45	36/03
25487	2	36/03
25524	43	33/02;1,5,20,24,26,32/03
25525	17	1,5,26/03
25526	2	33/02;24,32/03
25527	31	33/02;24,32/03
25528	5	42/02
25550	2	21/03
25563	50	33/02;14,18,21/03
25565	7	33/02
25566	27	18,30/03
25567	16	21/03
25570	3	16/03
25575	4	35,39/03
25600	47	25,27/03;1/04
25607	4	39/02;48/03
25608	21	16,26,34,38/03;1/04
25609	5	1/04
25611	22	1/04
25613	2	25,27,47/03
25640	40	15,25,31,34,39,52/03
25641	26	1/04
25644	13	20/03*
25646	7	N42/02
25649	19	44/03*
25650	33	25,30,31,39/03
25653	13	8/03*
25659	9	20/03*
25663	27	17,30,39/03
25664	15	17,30,39/03
25666	17	17/03
25667	20	15/03
25668	18	48/02;13,34/03
25670	41	38,48,49/02;4,5,13,20/03
25671	18	21/03*
25673	15	42/02;43/03
25675	9	20/03*
25677	20	32*,39,52/03
25679	10	20/03*
25681	16	28*,34,39/03
25683	18	32*,34,39,52/03
25685	9	22*,52/03
25687	12	30/03*
25700	3	15/03
25720	3	33/02
25800	3	36/02
25841	9	36/02
25848	25	5,13,15/03
25849	13	42/02;12/03
26001	4	9/03
26050	1	34/02;26,47/03
26060	1	49/02;42/03
26068	11	18,50/03
26081	8	46/02;16,42,43/03
26100	4	31/03
26122	30	22/03*
26125	3	41/03
26127	21	49/02;5/03
26128	50	49/02;5/03
26129	11	41/03
26142	10	33/02
26210	2	36/02
26218	2	31/03
26219	5	31/03
26229	11	31/03
26230	12	31/03
26240	7	9/03
26244	3	9/03
26245	16	51/02;15/03
26259	2	51/02
26261	27	8/03
26262	3	8/03
26282	6	22,23,34/03
26290	1	21/03**
26295	1	21*,22,34/03
26300	7	21/03*
26308	5	21*,22,23,34/03
26309	26	11/03
26310	1	N48/03*
26312	2	21/03
26316	3	21/03
26320	5	35/02;7,12,22,23,25,31, 40/03
26323	4	1/03
26327	2	N41/02*;N17/03
27005	4	6,8,9,22,23,34/03
27040	5	9/03
27041	4	50/02
27042	21	41,42/03
27060	2	22,23,34/03
27080	4	15,22,39,52/03
27081	6	49/02
27082	6	49,51/02
27083	39	28/03
27084	4	13/03
27100	2	8,21/03
27102	11	28/03
27120	4	41,43,44/02
27142	5	9/03
27160	2	8,13,35/03
27161	4	8,13/03
27163	21	49/02;8/03
27183	8	1,9/03
27186	8	1,9/03
28004	1	45/02;8,9,22/03
28006	1	8/03
28050	3	34/02;26,42,47/03
28084	4	17/03**
28150	3	8/03
28154	2	38/03
28190	2	41,43,45,46/02;18/03
28196	4	41,43,45/02;18/03
28197	4	45/02;18/03
28202	22	41,44/02
28210	2	33,35,39,41/02
28220	2	35,39/02
28221	18	33,37,39/02;5/03
28223	4	35,39/02
28260	30	35,37/02
28263	3	35,37/02
28264	3	35,37/02
28265	3	37/02
28281	32	36/02
28282	2	35/02
28300	1	39,50/02
28302	16	33,39,40/02;12/03
28310	2	33,35,39/02
28320	6	33/02
28325	2	5/03
29002	9	18,29/03
29015	5	16/03
29040	3	39,48/03
29105	5	49,50/03
29107	2	29,36/03
29127	4	29,39,42/03
29141	3	29,39/03
29142	3	7/03
35000	26	47,48/02;14/03
35008	21	45,48,50/02;5,25,27/03
35009	19	40,41,45/02;5,10,14, 49/03
35011	2	48/02;1,25/03
35036	21	36/02;10,15,27,43/03
35040	18	45/02;4,8,10,14,21,49/03
35041	8	35/02;4/03
35042	9	44/02;4,14,49/03
35044	9	38/02
35047	5	35/02
35060	14	40,41/02;10,14,49/03
35080	16	40/02;49/03
35081	15	22,27/03
35082	7	22,27/03
35083	8	20/03
35084	15	50/02
35086	5	22/03
35088	2	50/02
35099	3	41/02
35100	14	40,45/02;5,30/03
35101	6	41/02
35103	5	41/02
35120	13	40,45,47/02;5,30/03
35130	3	48,51/02;5/03
35135	1	5/03
35136	2	48,51/02
35141	11	34/02
35143	7	34/02
35144	3	11/03
35150	3	48/02
35155	3	25/03
35163	7	44/02
35166	4	35/02
35167	3	35/02
35169	2	35/02
35200	7	48,51/02;5,25/03
35236	2	38,50/02
35246	2	38,43/02
35247	4	50/02
35255	3	50/02;14/03
35256	2	14/03
35270	2	38,46/02
35276	3	46/02
35277	3	38,46/02
35279	3	38/02
35299	9	13/03
35301	6	17/03
35302	7	17/03
35303	7	40/02;17/03
35308	5	10/03
35330	2	38,41/02
35350	2	38,41/02
35402	3	38/02
36005	2	34,36,38,45,46/02;P12, 14,17,24,25,27,31,43, 44/03
36010	27	38/02;5,15,16,20,23, 43/03
36015	2	36,46/02;27,44/03
36040	16	1,15/03
36046	5	38/02
36060	17	38/02;5,8,20,21/03
36061	5	46/02;20/03
36062	11	40*,46/02
36098	6	5/03
36102	6	13/03
36103	9	13/03
36104	6	13/03
36106	7	47/02;5,13/03
36118	3	5/03
36120	9	46/02;5,8,16,23,27/03
36123	25	46/02;11,16/03
36124	18	16/03
36125	7	4,30/03
36137	4	38/02
36138	3	39/02;4/03
36139	4	4/03
36140	12	36,41/02;4,10,27/03
36141	7	4/03
36143	4	34/02;5,30,43/03
36161	10	34,44,45,47,50/02;4,10, 18/03
36162	10	35,45,47,50/02;4,18/03
36163	13	34,35,38,44,45,47,50/02; 4,18/03
36164	7	34,38,44,46/02;8,15/03
36165	6	36,44/02;10,27,30,43/03
36167	2	40/02
36173	1	40/02
36180	23	36,40,50/02;4,27,44/03
36181	18	36,40,50/02;4/03
36182	6	36,40/02;27/03
37000	22	47,48/02;14,23,43/03
37005	16	41,45,47/02;5,12,13,15, 23,28,29,30,50,51/03
37010	23	41,45,47/02;10,12,13,15, 19,23,27,28,29,30,43,50, 51/03
37025	26	38,51/02;1,24,25,27,31, 33,34,36,38,41,43/03
37032	2	1,6,25,31,38,42,43,45/03
37033	2	47/02;33/03

CHARTS AFFECTED BY NOTICE TO MARINERS
NM 33/02 THROUGH NM 1/04

Note: N indicates Not For Sale; P indicates Preliminary; T indicates Temporary;
* indicates New Edition/New Chart; ** indicates Chart Canceled

Chart No.	Ed. No.	Notice to Mariners No.
37034	2	8,14,33,41/03
37041	15	50/02
37042	5	41,45/02
37043	17	43/02;43,46/03
37044	16	45/02
37045	11	45/02
37046	18	43/02;43,46/03
37050	9	42,46/02;10,12,17/03
37060	3	46,50/02;9,13,18,43, 46/03
37061	15	36,38/02;5/03
37063	21	36,50/02;43/03
37075	3	5,18,43/03
37080	3	33,34,38,40,42,44,45,46, 51/02;1,4,7,9,14,15,18, 20,21,22/03
37081	23	38,43,50/02
37082	9	44,50/02;11/03
37084	9	38,40,43/02
37085	8	38,40/02
37086	8	38,50/02;4/03
37087	7	38,40/02
37088	9	5/03
37089	12	4,13/03
37090	8	45,51/02;1,7,9,14,16, 22/03
37095	3	1,7,9,11,14,15,16,20,22, 32,39/03
37104	3	41/02
37106	4	32/03
37110	11	47/02;20,25,31,32,39/03
37112	1	47/02
37115	2	33,47/02;7,25,31,32, 39/03
37119	2	43/02
37120	2	39,42,49,51/02;4,6,21,23, 24,25,26,27,30,32,39,42, 43,44,45/03
37121	11	25/03
37122	12	48/02;19,31,44,45/03
37123	9	49/02;6,20/03
37125	15	42,49/02;6,9,20/03
37126	8	41/02
37127	11	49/02;4,6,20/03
37129	6	39,42,49/02;4,6,20,23,24, 30,42,45/03
37133	4	44/02
37134	5	38/02;45/03
37136	6	38,46,50,51/02;30/03
37137	6	46,48/02;30/03
37139	8	1/03
37140	33	35,49,51/02;4,6,16,24,25, 30,32,42,43,44,45/03
37141	29	36,40,48,51/02;1,4,12,17, 19,24,27,31,45/03
37145	23	46,50/02;4/03
37147	15	35,36,40/02;1,10,12,16, 17,19,25/03
37148	13	35,38/02;4,10,11,27, 51/03
37149	10	44/02
37150	8	14,19,26,27,32,33,35,37, 39,41,43,46/03
37161	14	34,43/02;1,14,19,24,41, 43,46/03
37162	12	21,26,27,30,32,33,35,37, 39,40,41,43,45,46/03
37163	19	32,43/03
37164	4	23,26,27,30,32,35,37,43, 46/03
37165	2	34,36/02;10,12,13,15,21, 23,26,27,28,30,32,34,35, 37,39,43,45,50,52/03; 1/04
37166	2	14,19,21,26,27,30,32,33, 34,35,37,39,40,41,43,45, 46,51/03
37170	11	38/02;14,19,46/03
37175	2	5,27,30,45,46,51/03
37180	20	38/02;27,31,35,49/03
37182	14	35,47,48/02;24,27/03
37183	9	48,51/02;10,24/03
37184	8	48/02;5/03
37200	15	28,30,35/03
37202	2	22,27/03
37205	2	39/02;22,24,30,40/03
37221	13	34,36/02;6,10,11,12,13, 14,15,21,23,29,30,32,50, 51,52/03
37222	13	21,22,30,46,52/03
37223	14	42/02;21,26,27,30,32,34, 35,39,43/03
37224	11	22,23,30,37/03
37226	17	39/02;8,9,12,14,17,21,23, 51/03
37228	14	8,14,23,27,29,30/03
37229	15	8/03
37230	14	39/02;28/03
37231	18	6,10,12,14,50,52/03
37232	12	29,31/03
37234	13	7,8,31/03
37235	11	17/03
37238	6	17,21,30,33,37,40,41, 45/03
37241	17	26,27,30,32,33,35,37,39, 43,45/03
37242	10	26,30,32,35,39,43/03
37243	7	27,30,32,37/03
37244	11	23,26,27,28,30,32,33,35, 37,39,43,45,46/03
37246	14	21,24,27,30,32,33,35,39, 40,43,45,46/03;1/04
37248	18	39/02;21,23,24,26,27,30, 32,35,40,41,43,45/03
37258	4	1,11,22/03
37261	10	1,7,11,20,22/03
37262	20	1,11/03
37264	3	1,15,22/03
37265	3	1,7,17,32/03
37281	15	1,15,22/03
37320	16	38,44/02;9,10,11,P12,15, 17,21,24,36,38,44/03
37325	8	34,39,47/02;15,18/03
37326	2	34,47,51/02;15,18,21, 36/03
37328	2	42,44/02;11,15,21,24/03
37330	2	34,38,40,46/02;9,13, 14/03
37342	3	2,11,15,21,45/03
37343	10	45/02
37344	11	34/02;21,38,45/03
37360	15	34,43/02;2,9,10,11,15,17, 21,24,31,36,38,39,43,44, 45/03
37362	6	43,48,51/02;1,2,4,17,22, 32,33,38,39/03
37363	8	48/02;4,17,32/03
37367	1	38,49/02
37380	2	34,40,42,43,44,48,51/02; 9,10,17,21,38,39,41, 43/03
37400	10	34,38,40,41,44,46/02;6, 10,20,31,34,36,41,43,46, 47/03;1/04
37401	9	44/02;4,6,13,14,16,22,31, 36,43,44,47/03;1/04
37402	7	41,42,44,50/02;4,13, 14/03;1/04
37403	23	10,41/03
37420	1	34,43/02;1,7,41/03
37421	8	14,21,41/03
37423	5	14,21,41/03
37443	2	38,45/03
37445	1	48/02;1,34,38/03
37446	2	1,34/03
37461	9	51/02;6,20,25,36,50/03
37463	6	1,43/03;1/04
37481	7	47,48/02;6,7,14,30/03
37501	3	46,47/02;7,8,20,33/03
37505	2	46/02;7,33,41/03
37506	4	45,46,47,51/02;8,20,33, 48/03
38320	3	35/03
38480	6	48/03
38528	4	N20/03
38580	8	18/03
38585	4	18/03
38607	2	1/04
38610	1	1/04
38670	2	1/04
41000	2	15/03
41060	3	34/02;52/03
41100	2	N46,N52/03
42003		N23/03**
42004	1	N23/03*
42036	2	43/03
42038	2	43/03
42160	3	7,38/03
42301	3	38,52/03
42560	5	31,38,40/03
42580	5	40/03
42600	5	14,30,40/03
42620	5	14,38/03
42640	6	38,40/03
42660	5	38/03
42740	5	34,41/02;6,25,31,40/03
42742	3	6,8,30/03
42760	5	8,19,24,25,47,52/03
42762	3	N25,N30,N47,N52/03
42765	3	47,50/03
43000	4	9/03
43015	12	9/03
43030	24	2,9,10,11,12,13,15,17,22, 27,28,30,32,46,48/03; 1/04
43040	6	38,47/03
43058	3	20/03
43059	3	44/02;20/03
43060	4	44/02;27/03
43079	2	41/02
43080	4	44/03
43082	5	41/02;47/03
43101	3	46/02
43102	4	46/02
43104	4	46/02
43106	6	44/02;44/03
43125	7	44/03
43127	5	20/03;1/04
43140	4	41,48,52/02;12,35,38/03; 1/04
43141	5	52/02;12/03
43142	4	52/02;12/03;1/04
43143	4	12/03
43144	4	6,12,43/03
43145	4	12/03
43146	2	48/02;34,35,44/03
43147	3	35,38/03
43148	4	43/03
43150	2	N34,N35,N38,N41/03
43160	6	34,35,36,38,41/03
43161	2	41,44/02;35,41/03
43162	3	41/03
43163	3	44/02;41/03
43164	3	48/02;6,34/03
43166	2	43/03
43167	5	36,42,44/03
43168	2	36,42/03
43180	5	9,44/03
43181	3	43/03
43182	4	47,52/02
43204	4	36/03
43223	4	41/02
43225	4	52/02
43240	4	50,51/02
43242	4	52/02
43243	4	50,51/02
43247	5	44/03
43248	3	9,44,46,47/03
43252	1	44,46/03
43260	4	46,47/03
43261	5	46/03
43262	5	46/03
43263	7	44/02;37,44,46/03;1/04
43264	2	46/03
43265	2	44,52/02;37,46,47/03
43266	1	47/03
43270	2	44/02
43280	5	44/02;37,40,47/03
43281	6	27,37,44,46,47/03;1/04
43283	6	27,37,40,43,47/03;1/04
43284	4	51/02;40,43/03;1/04
43285	5	44/02;44,49,51/03
43287	2	27,37/03;1/04
43300	5	44,47,50/02;49,51/03
43301	4	45,50/02;49/03
43302	4	44,47,50/02
43303	4	41,47,50,51/02;43/03
43304	2	44,47,50/02;43/03
43320	5	49/03
43321	6	41,47/02
43323	4	27,49/03
43324	4	27,49/03
43340	13	49/03
43341	7	41/02;12,49/03
43342	7	26,49/03
43344	3	39/03
43345	4	1/03
43360	21	6,10,13,17,20,21,28,30, 32,43,52/03
43362	5	44/03
43363	5	45/02
43364	5	45,46/02
43366	4	44/03
43368	5	43,48/03
43369	6	43,48,50/03
43370	7	47/03
43371	13	38,43/03
43373	8	45/02;17,20,40,42,49,50, 52/03
43374	1	43/03
43375	7	46/02;6,7,10,12,16,18,23, 42,44,50,51/03
43377	2	47/03
43378	2	38/03
43382	2	48/03
43384	1	48/02;4,5,6,7,10,11,12, 13,15,16,17,18,23,25,26, 27,32,44/03
43385	1	45,48/02;5,11,13,20,23, 24,26,42,46,49,51/03
43386	2	47/03
44000	16	44/03
44001	2	48,49/02;1,6,7,8,9,11,13, 14,P20,23,26,50/03
44015	8	48,49/02;6,7,8,9,10,11, 13,14,24,26,40,44,47, 50/03;1/04
44030	7	46/02;4,8,9,13,19,48, 50/03
44036	5	13,16,17,20,23,28,30,32, 52/03
44037	5	16,22,52/03
44038	5	46/03
44040	23	44/02;6,10,13,16,17,20, 22,23,24,28,30,32,44, 52/03;1/04
44041	7	48/02;1,9,10,13,16,20,23, 28,52/03
44042	7	44,45,49/02;4,7,9,10,11, 17,19,20,25,27,28,29, 32/03
44043	8	44/02;1,6,9,10,11,13,16, 52/03
44044	6	6,10,13,16,44/03
44045	6	22,44/03
44046	10	22,24/03;1/04
44047	22	44/02;10,12,22,24,30,31, 32,40,48/03
44048	11	5,12,18,22,25,27,31,40, 48/03
44049	9	44,46,50/02;8,14,22,24, 30,31,40,48,50/03;1/04
44050	21	20,31,32/03
44051	1	44,48,50/02;1,11,14,22, 25,26,27/03;1/04
44057	5	29,30/03
44061	21	24,32/03;1/04
44062	8	28,40/03;1/04
44063	8	17/03;1/04
44064	19	22,28/03;1/04
44065	7	42/02;16,17/03
44066	10	39/02;31/03
44067	22	16,17,28/03
44068	11	44/02;10,11,13,40,51/03
44069	16	11,13,17,22,23,40/03
44070	7	28/03
44071	4	29/03
44072	4	40/03
44075	4	42/02;13,23,40/03
44076	3	22,28,30,32/03
44081	9	39/02;9,13,46,48/03
44082	11	9,33/03
44083	8	9,11,24,25,26/03
44084	1	6,11,26/03
44085	2	51/03
44100	7	44/02;2,9,11,12,13,22,31, 40,41,46,48,49,51/03

CHARTS AFFECTED BY NOTICE TO MARINERS
NM 33/02 THROUGH NM 1/04

Note: N indicates Not For Sale; P indicates Preliminary; T indicates Temporary;
* indicates New Edition/New Chart; ** indicates Chart Canceled

Chart No.	Ed. No.	Notice to Mariners No.
44105	2	49/02;5,6,8,24,26,27,41, 47,48,52/03
44120	7	2,9,10,15,19,20,22,23,24, 27,33,39,40,41,45,48, 49/03;1/04
44140	8	50/02;1,6,19,21,23,24,26, 31,40,44,47,50/03
44160	7	46/02;1,4,5,6,11,13,14, 15,20,26,31,41,47,48, 49/03
44161	2	50/02;1,2,6,10,21,35,39, 41,48,49,50/03
44162	1	50/02;1,24,47/03
44163	1	48/02
44164	1	46,48/02;1,11,18,22, 47/03
44165	1	46/02;1,5,6,11,20,22,24, 34,39,45,48/03
44178	2	2,5,7,10,16,26,27/03
44179	2	10,16,35,39,51,52/03
44180	6	34,45,46/02;1,2,5,7,8,9, 20,26,43,48,50/03
44181	5	5,10,13,20,21,27,48, 52/03
44182	4	48,49/02;1,2,15,18,27,42, 43,46,48,49/03;1/04
44183	6	48/02;1,6,8,9,10,19,20, 25,27,35,39,43,46,49/03
44184	9	45,49/02;2,10,13,20,22, 32,48,52/03
44185	7	45,49/02;1,2,10,27,32,48, 50/03
44186	2	45,46,48/02;1,2,5,8,9,10, 15,16,25,27,29,49/03; 1/04
44187	2	5,6,9,13,25,27,39,44,48, 50,52/03
44192	1	46,48/02;1,18,23,39,43, 44,48/03;1/04
44193	1	1,7,15,18,43,48,50/03
44200	9	34,52/02;4,9,12,13,22,27, 37,43,47,50/03
44203	1	33,48/02;2,5,15,25,52/03
44204	1	48,52/02;2,4,5,7,12,13, 27,50/03
44205	2	48,52/02;2,5,7,12,15,19, 22,26,27,29,31,39,43/03
44206	1	46/02;4,5,13,16,17,19,24, 28,40,46/03
44207	1	4,5,17,19,23,28,40,41,45, 46,50/03
44220	5	46/02;4,5,13,16,21,40,45, 46,48/03
44221	1	19,21,52/03
44223	1	6,13,21,24,48/03
44224	1	49/02;5,20,21,24,42/03
44240	8	49,50/02;4,7,13,14,15,16, 19,21,25,39/03
44243	2	5/03
44260	7	2,5,6,13,21,48,52/03
44280	9	34,49,50/02;2,6,12,15,19, 22,34,44,47,50/03
44281	2	49/02;12,15,19,21,22,27, 45,49,50/03
44282	1	49,50/02;13,17,19,21, 26/03
44283	2	50/02;8,21,43,45,49, 50/03
44284	2	41/02;6,42,44/03
44285	1	2,15,40,44,47/03
44286	1	2,27,40,47/03
44310	5	41,42/02;7,37,50/03
44313	1	41,47/02;36,37,39,40/03
44319	2	41,42/02;4,6,9,10,P20, 26,27,28/03
44320	4	6,8,9,15,P20,25,26,37,49, 50,51/03
44321	6	40/02;6,8,44,45/03
44340	11	37/02;4,6,8,9,15,17,P20, 26,33,37,49,50,52/03
44341	7	37,41/02;7,9,P20,26, 52/03
44342	8	37,41/02;6,52/03
44352	2	4,6,7,8,12,15,17,19,49/03
44360	9	34,37,41,42/02;4,9,10,20, 27,28,30,31,32,37,39,44, 52/03
44361	6	4,10,15,21,26,27,28,35, 52/03
44365	1	7,8,26,27,43,52/03
44366	1	34,41/02;44,52/03
44367	2	35,37,40/02;6,39/03
44400	4	48/02;4,6,7,8,9,12,15,17, 19,23,24,25,27,34,41,49, 50,51/03
44401	7	10,12,19,24,41,49/03
44410	4	4,6,11,12,13,14,15,23,24, 26,27,41,45,49,50/03
44420	6	36,49/02;8,9,10,11,12,14, 17,22,25,27,40,44,49/03
44430	2	6,10,11,14,19,24,25,40, 44,47,52/03
44444	6	9,12,30,34,35,36,38,41, 52/03
44461	10	6,10,24,25,26,28,31,36, 47,50/03
44462	4	27,39/03
44463	9	24/03
44465	2	6,25,47/03
44481	2	24,26,31,50/03
51007	22	38/02;7,27,33,40/03
51013	4	38/02;7,21,33,36,45/03
51017	31	37/02;24,40,44/03
51022	11	37/02;44/03
51027	8	45/03
51032	10	45/03
51061	14	1,7,15,17,19,21,22/03
51062	28	15,17,19,22/03
51064	2	52/02;1,17/03
51081	10	5,6,13,15,17,21,22,45/03
51082	7	5,7,13,15,17,21,22,45/03
51100	7	1,6,7,8,9,14,27,33,34, 41/03
51103	10	33,45/02
51104	1	33,45/02
51120	6	6/03
51135	1	22,46/03
51142	2	6,13,15,22,33,40,45/03
51143	4	6,40,45/03
51144	3	52/02;1,15,46/03
51145	2	42/02;13,22/03
51146	3	42,52/02;5,36/03
51150	1	50,51/02;1,13,15,22,33, 40,46/03
51154	3	50,51/02;13,15/03
51155	1	50,51/02;1,15,22/03
51158	2	6/03
51159	3	47/02;39/03
51160	20	48,50,51/02;1,4,5,6,7,14, 15,21,22,45/03
51163	4	4,43/03
51164	18	38,45,46,50/02;2,4,8, 43/03
51165	8	45,50/02;2,4,8,10,14,16, 39/03
51166	3	N45/02;N39/03
51167	6	45,50/02;2,4,8,10,16/03
51168	2	45,46,50/02;2,4,8,45/03
51180	5	13,16/03
51200	4	14/03
51220	8	33/02;18,43,45,46/03
51222	6	51/02;16/03
51223	2	17,18/03
51240	2	33/02;43,46/03
51260	4	37,50/02;16,18,28,43,44, 52/03
51261	23	5,6,13,15,19,40,46/03
51263	23	49/02;13,17/03
51341	23	48/02;6,16,34/03
51342	3	1/03
51344	2	5,7,16,18,44/03
51380	5	47/02;42/03
51420	5	42/03
51440	4	42/03
51500	6	20/03
51540	3	22,45/03
51559	3	41/02
51560	11	50/03
51562	10	50/03
51580	13	41/03
51600	12	20,39/03
51620	10	20,39/03
51621	9	20/03
51641	4	32,34,40/03
52031	1	6,21,48,49/03
52039	4	5*,7,8,9,13,14,18,21, 45/03
52040	17	43,50/02;13,16,18,34/03
52042	6	22/03*
52043	21	46/02;6,7,48,50,52/03; 1/04
52045	6	36/02
52046	21	50/02;6,7,16,18,21/03
52047	11	7,8,34/03
52048	3	8/03
52051	1	43/02
52052	1	43/02
52054	1	14/03
52055	1	14/03
52060	16	43,50,51/02;7,12,P20,26, 29,34/03
52061	2	45,48,51/02;7,12,20,P20, 26,29,34/03
52062	7	7,12,23,29,34/03;1/04
52066	3	50/02;14,16/03
52080	14	50,51/02;4,7,10,11,12,14, 20,P20,26,48,49/03
52082	3	45,46,48/02;11,12,20, P20,26/03
52083	2	45,46,51/02;1,16,46, 48/03
52084	2	45/02;4,10,11,12,14, 18/03
52085	3	50,51/02;4,11,16,46/03
52086	2	45,50,51/02;1,4,9,11,14, 36/03
52087	1	51/02
52088	2	45/02;4,10,11,12,14,18, P20,26,49/03
52092	1	46,51/02;16,48/03
52120	12	51/02;6,11,16,18/03
52121	8	45,46/02;1,6,8,11,16, 23/03
52122	14	45/02;11,14/03
52124	1	51/02
52125	1	45,46/02;8,11,16,18/03
52140	6	48,50/02;3,12,18,29,46, 49,52/03
52141	5	48/02;41,44,46,49/03
52142	2	12,18,23,29/03
52143	8	18/03
52144	5	50/02;3,7,8,10,14,16,18, 21,23,47/03
52160	7	50,52/03
52161	14	6,11,14,52/03
52164	2	14/03
52170	3	14,16,42,52/03
52172	2	40/02;1,52/03
52180	14	42,43,51/02;1,8,10,13,15, 16,50/03
52183	9	52/03
52200	8	7,17/03
52220	7	27/03
52221	7	27/03
52223	4	27/03
52240	9	27/03
53011	2	51/02
53031	1	39,48/02;5,12,14,24,31, 49/03
53058	2	4,37/03
53060	14	51/02;4,5,9,10,12,14,31, 36,39,44/03
53061	10	44,47/02;12,16,17,38, 44/03
53062	13	1,14,16/03
53063	9	33*,37/03
53064	6	33/02;10,20,39/03
53065	2	33/02;39/03
53066	2	33/02;20,39/03
53081	8	4,5,11,16/03
53082	13	40/02
53083	8	9,10,21,22,41/03
53084	6	51/02;14,16/03
53085	6	51/02;14,16/03
53086	8	46,48/02;17/03
53087	9	48/02;17/03
53088	7	33/02
53089	4	21,22,23,41/03
53090	1	41/02;50/03
53093	2	41/03
53100	16	33,39,42,51/02;6,10,13, 18,20,21,24,31/03
53101	7	33/02;8,13,16,24/03
53104	2	35,42/02;20,24/03
53105	20	37/02;8/03
53106	6	21,33/03
53107	16	35/02;6/03
53110	1	40/02;10,15,17/03
53111	3	44/02*
53120	14	39,42/02;5,6,7,13,17,31, 35/03
53122	3	40/02;7,8,16/03
53123	3	7,29/03
53125	2	46,51/02;13/03
53130	1	42,47/02;10,13,18/03
53133	4	33*,45/03
53135	2	51/02;7/03
53141	5	34,51,52/02
53147	3	36,39,42,51/02;6,7,10,13, 17,20,35/03
53160	14	51/02;3,6/03
53161	8	51/02;3,8,13,18/03
53162	7	50/02*;15/03
53164	9	37,51/02
53165	13	39/02;8/03
53180	10	33,34,43,51/02;1,3,6,7, 13,15,18,20,21,29/03
53181	4	34/02;1,13,21/03
53182	4	36/02;15,16/03
53183	13	35/02;20/03
53184	5	35/02;1,6,13,18,20/03
53200	6	33,36,43/02;5,6,7,15,16, 20,30/03
53201	6	51/02;18,21,38/03
53202	6	15,17/03
53203	11	5/03
53204	10	44/02;5/03;1/04
53205	3	5,26/03
53206	6	5,25/03
53220	6	36,43,51/02;5,16/03
53226	3	3*,17,18,35/03
53242	12	52/02;1,13/03
53244	2	1/03
53262	8	1/04*
53263	1	37/02;17/03
53264	5	17/03
53265	6	35,41,46,52/02;15,16/03
53266	4	1,8,13,17/03
53268	4	42/02;7/03
53269	5	17/03
53279	3	7,15/03
53281	4	40,52/02;15,18/03
53282	8	40/02
53283	4	33,52/02;40/03
53284	4	33,40/02;7,21,24/03
53285	4	35/02;7,15/03
53287	6	35,42/02;1,5,7,8,10,15, 22/03
53290	1	35/02
53301	4	22/03
53302	4	51/02
53303	6	49,51/02
53306	2	39/02;31,43/03
53311	3	39/02;37/03
54040	3	37/02;6,10,20/03
54041	7	35/02;4,8,16,17,24/03
54043	2	17/03
54060	5	37/02;16/03
54061	11	52/02;42/03
54063	3	1,13/03
54081	3	10/03
54085	2	40/02;15,24,42/03
54090	3	46/02*;11,15,19/03
54095	3	46/02*;8,15,30,42/03
54105	3	46/02*;8,13,17,19,50/03
54115	3	46/02*;15,30/03
54120	5	37,39,41/02;15,17,19/03
54125	3	46/02*;15,17,30,47/03
54131	2	50/03
54140	7	41/02;15,30,47,51/03
54151	1	3,42/03
54161	12	10,20,21/03
54165	2	33,37/02;38/03
54166	3	10/03
54167	2	20/03
54168	1	37/02;10,17,38/03
54169	3	37/02;17,38/03

CHARTS AFFECTED BY NOTICE TO MARINERS
NM 33/02 THROUGH NM 1/04

Note: N indicates Not For Sale; P indicates Preliminary; T indicates Temporary;
* indicates New Edition/New Chart; ** indicates Chart Canceled

Chart No.	Ed. No.	Notice to Mariners No.
54180	6	41,43,50/02;5,30,42,47, 51/03
54181	7	48/03*
54195	2	5,51/03
54200	4	5,8/03
54201	6	8/03
54222	4	43/02;20/03
54223	2	8/03
54224	2	8/03
54226	2	50/02;47/03
54227	2	50/02;47/03
54266	2	13/03
54279	4	50/02*;2,15/03
54280	10	5,15,22/03
54282	1	51/02
54283	5	52/02
54284	1	51/02;15,34/03
54287	7	5,15/03
54288	5	1/03
54289	8	1/03
54302	1	21/03
54318	3	1,14/03
54320	4	48/02;1,24,25/03
54321	2	25/03
54322	7	1/03
54329	4	5/03
54332	3	25/03
54333	3	25/03
54334	3	5/03
54335	3	24/03
54339	8	12/03
54340	8	48,51/02;3,4,24/03
54341	4	23/03
54343	10	48/02;4,5,11,12,13/03
54344	6	48/02;24/03
54346	8	11,12,13/03
54347	4	51/02
54350	4	51/02;37/03
54351	7	52/02;26/03
54352	3	52/02;1,3,33,37/03
54359	2	38/03
54360	12	52/02;20,21,34,50/03
54361	10	38/03
54362	3	52/02
54363	3	21,50/03
54364	2	52/02
54365	6	36/02;11,21/03
54368	4	50/03
54369	4	52/02;20,21,34,50/03
54380	6	42/02;3,16,18,28,34/03
54382	9	16,28,40/03
54386	10	42/02;16,18/03
54387	7	42/02;16,18,30,39,42/03
54389	8	43,52/02
54400	8	43/02;3,16,22,30,36, 37/03
54402	4	52/02
54403	4	43,52/02;24,30,36/03
54407	4	43/02;3,7,16,30,37,49/03
54409	2	7,8,12/03
54413	3	37/03
54416	5	33,37/03
54417	1	30/03*
54418	4	43/02;3,7,16,30,37,49/03
54419	2	3/03
54421	6	47/02;36,41,43,46,49/03
54422	4	46/03
54423	5	48/02*;17/03
54430	1	37,43/02;36,43/03
54440	4	41/02;17,38/03
54441	6	42/02;2/03
54462	5	17,51/03
54463	5	1/04
54464	5	17/03
54480	8	36,41/02;2,17,21/03
54481	8	36/02;33,43/03
55001	4	36,37,42/02;14,15,28,29, 33,35,36,39,43,44,52/03
55040	4	39,41/02;16,20,21,35,36, 39,41,42,50,52/03
55041	7	21,43,49,50/03
55042	1	42/02;17,35,37/03
55043	2	37,39,42/02;37,52/03
55044	5	41,43/02;16,42,52/03; 1/04
55045	2	41/02;39,52/03
55046	4	37,38,39,41,48/02;18,19, 35,36,41,46,50/03
55047	8	41,49,51/03
55048	12	36,37,39,41,48/02;20/03; 1/04
55049	6	41,43/02
55060	7	36,37/02;28/03
55061	1	28/03
55062	5	28,33/03
55063	1	6,44/03
55064	3	37,48/02;6/03
55082	9	5,25,32,44,46,50/03
55084	7	39/02;39/03
55085	9	5,31,33,36,39,46,50/03
55100	8	36,37/02;6,28,29,33,34, 39,43,44/03
55101	4	7,25,32,34,38,39,42,43, 46,50/03
55102	3	4,5,15,25,32,36,43,46,50, 52/03
55103	2	48/02;1,4,5,7,15,19,20, 25,26,27,31,35,36,38,42, 43,45,46,50,52/03
55104	2	48/02;4,5,7,14,19,31,33, 36,45,46,52/03
55105	7	36,41,42/02;14,15,29,33, 36,42,43,48,52/03
55110	2	37/02;6,29,43,44,51/03
55120	2	36/02;6,14,28,33,34, 42/03
55127	2	10,14,24,27,32,36,51/03
55128	2	33,36,38/02;1,4,5,8,14, 26,27,28,32,34,43,50/03
55129	7	33,36,37/02;6,15,27,34, 35,42,45,46/03
55130	2	45/02;5,14,19,32,33,34, 39,42,46,50/03
55131	1	36,45/02;6,19,25,38, 39/03
55133	3	5,14,34,36,38,46/03
55138	4	52/03
55139	5	41/02
55140	2	1,5,14,29,33,34,35,36,42, 45,46,47,52/03
55150	2	37/02;15,36,48/03
55160	2	42/02;29,41,42/03
55161	1	17,41,42/03
55170	2	36,41/02;46/03
55180	2	33/02;1,15,29,33,36,39, 42,45,46,47,52/03
55190	2	6,20,27,39,40,51,52/03
55200	2	8,10,20,25,26,27,28,32, 33,36,39,42,45,46,47,50, 52/03
56011	1	50,52/03
56031	1	1,2,17,21/03
56041	4	21/03
56044	3	38/02
56060	9	27*,38/03
56063	1	16/03
56064	6	38/02;2,16/03
56065	3	33,38/02;16,38/03
56067	3	48/02*;20,38/03
56081	19	41/02
56082	16	29/03
56100	14	33/03*
56101	6	33/02;1/03
56102	23	1/03
56103	6	1,33/03
56104	3	22/03*
56105	1	38/03*
56120	12	1/03
57000	10	43/03
57029	9	12/03
57035	10	10,12,23/03
57060	7	43/03
57063	5	40,41/02
57064	3	41/02
57101	18	41/02
57103	2	16/03
57120	13	43/02
57140	10	43/02
57141	14	43/02
57142	6	43/02
57160	10	43/02
57162	7	43/02
57164	2	43/02
57165	1	43/02
57170	1	43/02;52/03
57200	6	11,52/03
57201	5	52/03
57220	4	11/03
57241	12	31/03
57242	8	41/03
57245	1	41/03
57260	3	23/03
57261	2	23/03
57262	4	23/03
57381	12	52/02;15,16,23/03
57400	4	12/03
57408	2	12,24/03
57420	3	12/03
57460	4	10,12,29/03
57471	3	12,15/03
57472	2	12/03
57480	8	12,15,23,27/03
57482	12	24/03
57483	11	24/03
57484	19	15,23,24,27/03
57488	6	24/03
61000	20	10,15,23,27,31/03
61020	2	27/03
61036	8	7/03
61040	6	10,31/03
61050	4	10,15,31/03
61051	7	15,24/03
61060	5	12,27,39/03
61061	9	10,12,15,24/03
61070	4	9,39/03
61071	9	18,39/03
61080	4	9/03
61090	5	12,27/03
61091	5	12,18,24,27,35/03
61092	13	18,27,35,39/03
61100	4	10,12/03
61110	3	25/03
61111	12	25,27,34/03
61112	10	35/03
61141	6	38/02;35/03
61142	6	38/02;7,35,39/03
61180	4	38/03
61190	4	39,41/02
61204	5	13/03
61300	2	7/03
61310	2	33/02;7/03
61311	5	33/02
61312	3	33/02
61331	4	7/03
61400	2	7/03
61410	2	7/03
61430	2	7/03
61433	1	7/03
61434	2	7/03
61541	8	41/03
61542	6	41,46/03
61560	2	7/03
61562	2	6/03
61581	5	28/03
61582	4	28/03
61591	4	28/03
61610	7	34/03
61611	11	34/03
61612	4	34/03
61650	3	12/03
62000	20	46/02
62001	5	11*,28,50/03
62024	13	38,40/02;29/03
62028	15	10/03
62032	16	11*,17,21,41/03
62033	3	N11*,N17,N21,N41/03
62046	3	19/03*
62050	6	44/02
62092	7	41/02
62093	7	41,49/02
62095	3	11*,32/03
62097	6	38/03*
62098	7	33/03*
62100	6	P23,26/03
62110	9	P23,26/03
62140	1	34,40/02
62142	10	32/03
62143	3	32/03
62170	2	38/02
62171	4	38,47/02
62188	3	50/03
62191	15	11*,15,28/03
62194	8	36/02;4/03
62195	7	19/03*
62220	9	21/03*
62222	5	19/03*
62225	3	37/02;17/03
62230	2	50/03
62241	10	9/03
62242	11	47/02;9/03
62250	4	34,38/02;32/03
62270	4	37,41/02;29,32/03
62271	5	37,41/02;10/03
62290	3	37,41/02;10,21,P23, 26/03
62295	3	21,P23,26/03
62302	2	4/03
62310	2	29/03
62330	2	38,40/02
62340	3	38/02
62343	3	8/03
62350	3	10/03
62355	6	8,29/03
62360	5	38/02;12/03
62361	2	N38/02;N12/03
62366	4	33/03*
62391	5	33/03*
62393	7	34,37,50/02
62394	10	34,37,50/02
62395	3	25/03*
62400	17	33/02;4,9,31/03
62401	9	6,10,41/03
62402	10	10/03*
62404	3	6/03
62405	8	43/03
62406	2	33/02;28/03
62408	7	10/03
62409	6	7/03
62411	1	52/02
62412	12	52/03
62413	12	28*,50,52/03
62417	1	52/02
62419	6	33/02;8/03
62420	5	33,37,39/02;8,52/03
62429	9	39,43/02
62431	8	37/02
62432	17	13*,30,50/03*
62433	12	34,45/02;1/03
62434	9	40,46,52/02;8,12,17,18, 21,23,43,50/03;1/04
62437	10	30*,32,35,37/03
62439	4	1/03
62440	8	16*,41/03
62441	10	36/02
62442	6	24/03
62446	3	43/03
62453	4	16*,50,52/03
62455	7	39,43/02
62457	6	11/03*
62459	2	6,41/03
62460	4	33/02;10/03
62464	2	49,50/02;4/03
62480	2	16*,18,32,41/03
62490	2	16*,17,18,21,32,50/03
62498	4	4,9,31/03
62499	4	49,50/02;4,9,31/03
62510	3	11*,12/03
62512	3	N11*,N12/03
62515	2	45/02
62520	6	20*,28,32,41/03
62521	4	N20*,N28,N32,N41/03
62530	6	20*,28,32,52/03
62531	4	N20*,N28,N32,N52/03
62540	6	34,40,45,48,50,52/02;8, 12,17,18,21,30,35,43, 50/03
62541	3	N34,N40,N45,N48,N50, N52/02;N8,N12,N17, N18,N21,N30,N35,N43, N50/03
62550	3	16*,28,32,52/03
62560	4	16*,18/03
62570	4	33,34,36,40,45,48/02;8, 12,17,18,30,35,37,43, 50/03;1/04
62572	1	50/03*
62580	3	33,45/02;12,35/03

CHARTS AFFECTED BY NOTICE TO MARINERS
NM 33/02 THROUGH NM 1/04

Note: N indicates Not For Sale; P indicates Preliminary; T indicates Temporary;
* indicates New Edition/New Chart; ** indicates Chart Canceled

Chart No.	Ed. No.	Notice to Mariners No.
62590	2	36,40,46,48/02;8,12,17, 18,21,23,30,37,43,50/03; 1/04
62591	3	N36,N46,N48/02;N8, N12,N17,N18,N21,N23, N30,N37,N43,N50/03; N1/04
63000	13	48/02;40/03
63005	18	16/03
63010	14	52/02;44/03
63015	11	38,40,52/02;9/03
63020	15	4,9,11/03
63040	2	46/02;52/03
63050	2	46/02;45/03
63053	4	39,45/03
63055	2	39/03
63060	7	45/03
63062	7	7,16,18,37,44,50/03
63063	9	20/03
63065	6	44/03
63070	3	16/03
63080	5	48/02
63090	8	15,30,40/03
63091	4	39,48,52/02;9/03
63100	2	44/02;30/03
63101	15	15,30,40/03
63102	19	15,30,40/03
63103	17	15,16/03
63110	4	40/02;16/03
63111	9	48/02;9/03
63120	2	44,48,52/02;8/03
63121	5	48/02;5,8/03
63200	5	52/02;30/03
63201	9	40/02;30/03
63205	2	30/03
63210	3	45,52/02;16,30/03
63220	5	45,52/02
63230	6	45/02
63231	8	45/02
63232	3	45/02
63240	4	19/03
63250	6	40/02;11/03
63252	1	33/03
63271	8	52/02;8/03
63290	7	38/02;10,22/03
63291	9	33/02;16/03
63310	5	11/03
63320	8	37,49/03
63321	6	42/02;9,37,49/03
63322	2	9,49/03
63330	9	39/02;4/03
63337	15	39/02;4/03
63370	1	20/03
63400	1	39/02;8,11/03
63410	6	39/02;8,9/03
63413	5	39/02
63417	2	39/02
63420	2	39,45/02;8/03
63424	2	45/02
71005	1	34/02;2,6,12,13,16,23/03
71006	5	39/02;23/03
71009	3	39,46,48/02;1,6,7/03
71012	3	33,39,46/02;1/03
71015	4	23/03
71018	10	33,35,37/02;7,12,13,15, 21,25,26,27/03
71027	9	34,38,45,49/02;2,4,5,14, 18,23,33/03
71033	31	37,38,49/02;3,12,14,15, 23/03
71036	8	35,44/02;12,14,23,26/03
71040	5	34,42/02;7,47/03
71042	1	34/02
71045	2	23/03
71058	2	36/02
71059	1	36/02
71061	15	36/02
71066	1	39/02;6,7,10,24/03
71081	3	21/03
71091	4	1,2/03
71140	6	33,39,46/02;1/03
71180	29	33,37/02;7,12,13,15,21, 23/03
71185	24	7,13,15/03
71186	2	7/03
71210	18	44/02;3,23,27/03
71211	4	38/02
71212	1	38/02
71230	11	38/02;6/03
71241	10	6,12,16,20/03
71243	5	15/03*
71247	18	5,6,8,14,17,21,22/03
71248	2	N51/02*;N1/03
71249	2	35/02
71251	11	35,40/02;1,15,21,50/03
71253	10	35,40,42/02;5,6,7,13,14, 16,17,21/03
71255	6	28/03*
71257	2	5,6,7,12,13,16/03
71258	2	35/02;5,6,7,13,22/03
71259	3	15*,17,19,44/03
71261	8	35/02;2,16/03
71262	7	6,33/03
71265	3	46*,49/02;7,13,15,16, 20/03
71271	10	34,52/02;19/03
71272	10	34/02;19/03
71273	2	51/03
71275	3	35/02;2,6,16,19,33/03
71281	7	51/02;34/03
71285	3	34,52/02;13,19/03
71295	2	34,39,40,52/02;12,19/03
71305	2	34,36/02;2,13,23/03
71311	4	7/03
71313	8	45/02
71314	5	6,10/03
71315	2	34/02
71320	1	35/02;5,14,33,38/03
71325	8	5/03
71330	13	35/02;5,33,38/03
71331	11	5,7,8,33,38/03
71333	2	6,7,33/03
71335	2	8,38/03
71340	11	40,46/02;2,4,5,6,7,33/03
71343	3	7/03
71348	3	35/02;7,23/03
71349	2	23/03
71350	8	5,6,7,14/03
71400	5	14,23/03
71401	1	40,46,51/02;5/03
71402	1	40,46/02;4,5,6,33/03
71410	1	39/02;12,23/03
71420	1	38,39/02;3,12,14,23/03
71430	3	11*,20,23/03
71440	2	11*,23/03
71445	1	7/03
71450	1	7/03
71455	2	11*,23/03
71460	1	41/02;23/03
71470	2	38/02;14/03
72000	8	35,47,50/02;2,20,21,23, 24,27/03
72007	10	36,38,47,51/02;2,5,7,11, 27,50/03
72014	10	46/02;7,19/03
72021	8	36,38,47,50,51/02;7,20, 23,27,50/03
72028	7	34/02;22/03
72035	8	8,21,27/03
72045	2	8,27/03
72050	4	23/03
72060	8	50/02
72070	4	2,9/03
72075	2	9/03
72080	7	51/02;2,9/03
72085	3	15*,50/03
72094	2	38/02;7/03
72100	7	7,19/03
72103	2	4,6,7,19/03
72105	2	36,38/02;7,11,19,50/03
72107	2	7,19/03
72109	3	42,44/02
72130	4	46/02
72131	3	11/03
72161	10	10/03
72181	2	36/02;7,11,50/03
72190	2	10/03
72201		8/03
72211	6	43/02;5,8/03
72223	8	27/03
72231	8	21/03
72234	2	18,19/03
72236	1	9,12/03
73000	9	40,52/02;10,20,21/03
73002	4	5,11/03
73004	4	10/03
73008	8	11,13,23/03
73012	6	11/03*
73014	10	48,52/02
73016	4	44/02
73020	9	9,21,22/03
73024	3	39/02
73030	4	22/03
73032	4	9,22/03
73041	2	5/03
73191	3	7/03
73271	7	13/03
73552	4	34,45/02;1,7,9,10,38/03
73570	7	34,45/02;1,10/03
73580	4	52/02;43/03
73581	4	52/02;3,43/03
73590	6	47,52/02;36,43/03
73601	3	34,35,47/02;43/03
73631	4	36,46/02;1,17,40/03
73640	5	36/02;16,40/03
73650	5	40/03
73653	1	40/03
74000	6	36,47/02;2,7,18,41/03
74002	2	35,47/02;31/03
74003	5	47/02;7,10,31,34/03
74004	2	35,37,39,47/02;9,30/03
74005	2	34,35,46,47,51/02;4,7,9, 16,27,30,38/03
74007	1	36/02;46/03
74008	6	51/02
74009	10	38,49/02;8,9,21,36,44/03
74012	10	37,40,49/02;6,8,19,20,27, 36,37/03
74015	10	40/02;21,31,36/03
74016	3	27,42,48/03
74017	4	37,45/02;18,31,38/03
74018	6	44/02
74020	4	33,37,38,43/02;5,18,31, 38/03
74021	7	33,35,39,44/02;7,10,26, 31,35/03
74024	7	44/02;36,49/03
74027	9	43,44/02;39/03
74030	6	51/02;42/03
74051	2	42/03
74053	2	51/02
74151	9	36,44/02;2,20,29,40, 41/03
74152	11	36,44/02;27,30,34/03; 1/04
74153	2	36,44/02;2,27,41/03;1/04
74162	4	36,46,47/02;8/03
74171	4	33,36,47/02;3,10,18,20, 40/03
74172	5	36,47/02;7,10,18,40/03
74181	8	33,35,37,38,39,47/02;10, 34/03
74182	12	33,35,37,38,39,41,42,44, 51/02;6,10,17,25,34,38, 39,40,41,42,49/03
74183	11	38,39,42/02;4,6,17,25, 38/03
74184	10	33,35,37,38,46,48/02;17, 34/03
74186	7	34/02;4,10,17,21,27,30, 36/03
74190	7	35,36,37,46/02;1,16,31, 34,39/03
74191	2	35,46,48/02;1,7,9,29/03
74192	3	35,46/02;1,40/03
74200	8	37,46/02;1,8,32,40/03
74201	9	32/03
74202	3	1,7,27/03
74204	5	37/02;1,7,8,32,40,46/03
74205	2	27,32,35/03;1/04
74206	2	34/02;27,32,35/03
74210	7	7,17,37,46/03
74220	8	35,47,51/02;30,37,46, 50/03
74221	2	35,51/02;30,38/03
74229	2	33,37,43,47/02;18,26, 50/03
74230	7	39,42/02;5,7,36,46,50/03
74231	7	35/02;3,21,36,50/03
74232	9	5,7,21/03
74234	1	8,17/03
74240	8	34,39,42/02;4,5,7,8,9,41, 46/03
74251	8	34,37,42,44,46,51/02;6,9, 17,21/03
74252	9	47/02;5,7,9/03
74253	6	47/02;8,9,16,20,21,30/03
74261	9	41,49/02;4,10,30,39/03
74265	2	38,41,43,47,49/02;7,9,16, 21,30/03
74270	3	38/02;7,38/03
74271	9	38,46/02;19,26,27,29,30, 38/03
74272	7	4,19,29,30/03
74273	5	38,41,43/02;7,19,27/03
74281	7	3,30,52/03
74283	2	46,49/02;27,52/03
74285	2	34,35,45/02;1,9,16,38, 50/03
74286	2	29,35/03
74287	2	34,38,52/02;9,47/03
74289	5	9/03
74290	11	34,39,45,46,48,49,51/02; 1,7,9,10,16,27,30,38, 50/03
74292	8	34,38/02;9,27,52/03;1/04
74293	7	34,45,48/02;9,16/03
74294	3	34,45/02
74295	3	4,9,27,29,35/03;1/04
74296	4	34,38,49/02;9,27,52/03
74320	3	35/02;8,18,41,43/03
74340	3	16/03
74350	4	16,44/03
74376	5	43/02;9,16,44/03
74380	4	8,9,26/03
74391	3	26/03
74392	7	39/02;25,49/03
74393	9	38,41,50/02;3,39/03
74394	2	41,49,50/02;3,39/03
74410	3	38/02;7/03
74415	1	39/02
74420	3	45/02;19,27,30/03
74430	2	49/02
74440	3	39/02;2/03
74450	3	49/02;2,37/03
74455	3	48/02;1,4,38,49/03
74460	4	37,40,46,49/02;6,20, 37/03
74465	2	9,36,38/03
74470	2	8/03
74475	2	44/02;42,48/03
74480	2	44/02
74485	3	43/02
74493	3	38,43,45/02
74494	2	41/02;8,9,16/03
74510	2	33,35,37/02;5,10,17,18, 35,38/03
74515	4	33,35,39/02;4,7,10,31, 35/03
74517	3	39,41/02;4,31/03
74521	3	41/02
74530	2	44/02;36,49/03
74535	2	42,44,48/02;36,38,49/03
74545	3	40/02;18,32/03
74550	4	5,32/03
74555	3	34,43,44,48,51/02;5/03
74560	10	40,43,46,48,50/02;4,5,18, 31,32/03
74561	2	5/03
74581	9	34,36,40,41,43,45/02;27, 31,39,48/03
74582	9	40/02;17,20,27,31,39, 48/03
74583	15	34,40,43,44,48/02;38, 48/03
74584	5	34,41,43,45/02;26,27,36, 38,39,48/03
74590	2	51/02
74591	7	40/02;8,38/03
74595	2	42/03
75000	6	47/02;6,31/03
75001	3	47/02;5,6,31,32/03
75010	7	41,42,50/02
75025	9	36,39/02;2,4,8,25,27,36, 38,39/03
75035	18	36,39/02;2,6,26,27/03
75051	6	5/03
75110	2	50/02

CHARTS AFFECTED BY NOTICE TO MARINERS
NM 33/02 THROUGH NM 1/04

Note: N indicates Not For Sale; P indicates Preliminary; T indicates Temporary;
* indicates New Edition/New Chart; ** indicates Chart Canceled

Chart No.	Ed. No.	Notice to Mariners No.
75120	2	42/02
75130	16	34,41,50,51/02;5,7,8,16, 19,25,26,37/03
75131	7	17,39/03
75132	11	17,19,25,29,32,35/03
75134	3	33,51/02;5,19,29,37, 45/03
75142	5	36,42,50/02;35/03
75143	4	33,36,38,42,50/02
75144	3	33,36,42,51/02;4,10,18, 25,30,38/03
75150	5	50/02;16,19,26/03
75160	6	17,18,19,25,32/03
75170	12	38,39/02;8,25,38/03
75171	22	33,36,38,40,42,48,52/02; 1,6,16,26,35,38,40,44/03
75172	5	39/02;49/03
75173	9	33,36/02;1,6,20,26,35,38, 40/03
75175	9	33,38,40,45,50/02;6, 18/03
75176	9	42,50/02;25,26,32,40, 44/03
75177	7	38,48,50,52/02;6,26, 38/03
75180	2	8,25,38/03
75185	2	47/02;8,36/03
75190	2	47/02;25,36/03
75191	6	37,38,43,47/02;8,19,30, 34,36,38/03
75193	6	49/02;1,5,7,10,16,19, 35/03
75207	2	36,52/02;4,16,33,37,43, 49/03
75208	2	50/02;30,33/03
75213	2	36,52/02;33,38/03
75215	2	36,39,40,52/02;7,33, 38/03
75220	12	36,39,49/02;4,20,26, 39/03
75222	8	35,40/02;1/04
75240	4	36,39/02;2,4,27,39/03
75241	6	34,36/02;26,35/03
75251	5	33,48/02;3,19,37,40/03
75261	6	33,36,48/02;3,6,26,31, 38/03;1/04
75262	6	38/02;16/03;1/04
75263	9	5,26,31/03;1/04
75264	17	33,34,37,41,42,44,45/02; 2,27,32/03;1/04
75265	2	6,20,31,32,38,40/03
76015	1	35,40/02;28,45,52/03
76030	9	49/02;52/03
76040	8	47/03
76050	8	49/02;18,28,52/03
76052	8	4,5,28/03
76054	5	49/02;52/03
76056	3	9,37/03
76060	7	40/02;52/03
76061	3	40/02;9,52/03
76070	9	35/02;28,45,47,51/03
76071	9	35/02;28/03
76080	8	1,18,47/03
76081	7	28,37/03
76083	3	1,37/03
76120	6	45/03
76121	8	47/03
76140	7	46/02
76141	8	46/02;28,37,45,52/03
76142	1	46/02;37,45/03
76144	1	28/03
76146	1	28,45/03
76147	1	28/03
76150	6	35/02
76160	4	28/03
76161	10	40/02;47/03
76162	1	18,28/03
76170	7	28,52/03
76180	1	28/03
81004	3	37*,43/03
81048	9	52/03*
81054	14	52/03*
81060	2	43/03
81063	5	47/03
81067	6	46/03*
81076	10	41*,44/03
81092	3	38*,50/02;32/03
81711	6	31/03;1/04
81715	4	31/03;1/04
82005	5	17/03
82010	6	17,39/03
82015	13	39/03
82020	7	39/03
82192	6	43/03
82200	2	17,41/03
82210	2	42,48/02
82215	2	41/03
82242	1	35,48,50/02
82244	5	35,42,48/02;20,39/03
82253	7	35,48,50/02;20,39/03
82280		N39/03
82646	2	33/02
82649	5	33/02
82683	4	33/02;17/03
82684	3	33,38/02;7/03
82689	3	38/02;17/03
82694	6	38/02;17/03
82697	6	38,46/02
83010	6	6/03
83020	8	24/03
83021	1	43/02
83023	4	43/02
83025	1	12,45/03
83026	32	41/02;6/03
83039	11	41/02;6/03
83251	2	2,12/03
83252	8	2,12/03
83253	2	12/03
83397	6	1/03
83425	6	35/02
83473	7	37/03
83484	10	23,42/03
83574	2	7/03
83580	2	8,45/03
83590	1	45/03
91005	6	45/02;19,42/03
91008	1	44,48/02;8,10,12/03
91010	6	48/02;10,12/03
91020	5	19,46/03
91025	8	46/03
91030	3	42/03
91170	2	38,41,44/02
91280	7	19,43,46/03
91289	19	43/03
91294	8	19/03
91297	9	19/03
91300	3	46/03
91331	3	42/03
91340	3	42/03
92006	5	45,46/02;5/03
92025	3	42/03
92030	4	42/03
92033	5	45/02
92150	3	43/03
92160	3	43/03
92170	3	43/03
92290	2	19/03
92296	3	19/03
92410	3	42/03
92450	3	42/03
92560	4	45/02
93006	2	39,45/02;4,8,10,43,44, 48/03
93010	6	38,40,41/02;2,13,14,18, 24/03
93018	8	1,14,18,24/03
93020	2	38/02;4,13/03
93025	5	45/02;45/03
93030	6	45/02
93032	3	45/02;24/03
93043	1	45/02
93046	1	45/02;5/03
93047	2	45,49/02;24/03
93048	1	35,49/02;5,14,33/03
93049	1	45/02;4/03
93061	4	45/02
93101	2	N34,N38/02;N2/03
93110	2	38,40,41/02;1,2/03
93115	2	40,41/02
93117	2	40,41/02
93160	4	34/02;1,14,24,47/03
93180	7	34/02;47/03
93220	6	34/02;47/03
93240	11	34/02;16,24,47/03
93241	9	8,16,25/03
93243	6	42/02
93244	7	16/03
93245	6	16,24/03
93260	8	7,18,47/03
93261	5	7,47/03
93280	4	18/03
93360	5	38/02
93520	13	45/02;15/03
93610	3	44,45/02;6/03
93650	2	44/02;6,24,28,49/03
93652	2	3,6,24,49/03
93680	3	45,47/02;24/03
93690	2	44/02;6,45/03
93698	3	45/02;28/03
93710	3	6,15,43,52/03
93720	10	39,45,50/02;8,15,17,20, 24,28,42,43,44,48,49/03
93721	5	39,42,45,50/02;4,11,17, 20,23,25,40,41,43,44,45, 46,48,49,50,52/03;1/04
93725	6	45/02;24,49/03
93726	4	48/02;8,12,17,45,50/03
93730	3	39,40,42,45,47,50/02;2,4, 17,24,28,31,41,42,43,46, 47,48,49/03
93733	13	39,45/02;4,19,20,25,40, 41,44,45,47,48,52/03; 1/04
93734	12	51/03*
93736	22	41/02;4,20,25,40,41,45, 46,50/03;1/04
93778	8	47/02;7/03
94004	6	33,37,44,52/02;8,9,10,12, 17,18,42/03
94016	2	33,35,52/02;3,9,10,14,17, 21,33,47/03
94028	7	40,42,52/02;1,6,7,8,9,11, 14,17,21,24,27,31,33,40, 51,52/03;1/04
94033	5	19,21,23,29,42,44/03
94040	13	37,47,51/02;6,8,10,17,18, 28,31,43,51/03
94042	9	47,51/02;7,18,24,43, 45/03
94060	10	33,37,46,47/02;7,8,10,12, 14,15,18,24,31,42/03
94061	5	33,35,47/02;23,41,42, 52/03
94063	4	33,41/02;8,18/03
94067	10	33/02;10,11/03
94080	7	33,44,48/02;10,19,22,32, 51/03
94082	8	44/02;8,19,22,51/03
94083	12	44/02
94120	6	33,38,48,52/02;9,10,17, 18,21/03
94122	7	40/02;35/03
94123	9	33,38,42,44,52/02;9,10, 15,17,18,28/03
94124	13	38,42,44/02;10,15,17,25, 28/03
94127	2	33,38/02;6,9,13,16,18/03
94160	7	33,38,44,46,47,50,51, 52/02;9,10,12,16,17,18, 19,28,31,41,42/03
94164	2	46,50,51/02;12,16,19,41, 42,43/03
94165	4	50/02;18,24,43/03
94180	9	42,44,47,50,51/02;23,28, 44/03
94184	2	N51/02
94187	3	14,23,36,45,46/03
94188	2	44,46,47,51/02;8,28/03
94201	1	51/02;24,28/03
94203	10	41,42,44,46,47,52/02;10, 11,24,41,42/03
94206	3	41,42,44,47,52/02;11,19, 44/03
94207	5	N42,N44,N47,N52/02; N11,N19/03
94208	6	N44/02
94216	6	45/02;10,17,42,44,47/03; 1/04
94217	4	6/03
94218	3	36/02;6,18/03
94219	1	47/02;46/03
94220	4	41,42,47,49/02;8,10,11, 17,18,33,42,44,47/03
94260	5	49/02;1,6,11,31/03
94280	5	51/02;15,32/03
94281	6	6,42/03
94282	9	46/02;8/03
94283	7	46/02;2,8,12,32/03
94290	2	1,7,31/03
94322	14	8,47/03
94360	6	43/02;6,13/03
94361	13	13,15/03
94363	4	43/02;16,18,29/03
94380	4	N5,N6,N18/03
94384	3	5/03
94420	3	39/02;4,8,11,13,14,23,42, 44,47/03
94421	10	45/02;4/03
94423	12	45/02;11/03
94440	2	46/02;18/03
95016	8	40/02
95040	8	40/02;11/03
95041	7	23,50/03
95060	13	40,43,44,47,48,52/02;1,6, 11,14,17,19,21,23,29,31, 33/03
95065	5	48/02;10,31/03
95066	11	41,43,44,47,48,49,50/02; 1,5,6,17,19,21,23,25,27, 31,32,33,37/03
95067	13	41,44,46/02;1,5,10,17,23, 28,37/03
95068	1	41,42,45,47/02;12,14,17, 25,28,29,37/03
95080	13	33,40,44,45,50,52/02;1,6, 7,9,10,14,17,19,21,24,25, 27,28,30,31,32,48,52/03
95082	9	33,44,46/02;1,4,7,11,17, 25,27,28,30,52/03
95083	8	33/02;1,4,19,28/03
95084	7	50,52/02;8,12,17/03
95085	4	45,52/02;1,6,11,12,27, 33/03
95086	5	45,52/02;1,6,8,11,12,23, 27,31,33/03
95087	3	33,40,48/02;1,8,30, 31/03;1/04
95100	12	38,39,43,44,45,46,47,50, 52/02;1,4,6,7,8,9,10,17, 23,25,27,28,29,31,37/03
95101	8	39,44,50/02;1,5,6,9,14, 17,28,31/03
95102	8	38,42,45,46,47,48,50, 52/02;1,4,5,8,13,14,17, 23,25,27/03;1/04
95103	8	42,43,45,47,52/02;4,6,7, 10,12,19,27,28,31/03
95120	7	42,43,52/02;1,4,14,21, 26/03
95138	8	45,46,48,49,50,52/02;8, 16,17,19,23,24,25,27,28, 30,35,36/03
95140	15	38,40,41,44,48,49,52/02; 1,7,8,9,10,17,21,24,25, 27,29,33,35,37,51,52/03
95141	8	45,47,50,52/02;1,6,7,8, 17,19,21,23,25,29,37, 51/03
95142	9	50,52/02;8,10,19,23, 29/03
95143	11	40,45,47,48,49,50/02;1,5, 6,7,8,9,10,11,12,13,16, 17,19,23,24,25,27,28,30, 36/03
95144	9	38,41,46,48,50,52/02;1,6, 8,9,10,11,13,16,21,23,24, 35,37/03
95146	14	36,38,39,40,41,44,46,47, 48,50,52/02;1,8,9,16,21, 23,24,31,32,35,37,48/03
95147	13	39,41,44,45,46,47,48, 49/02;1,5,9,19,23,25,28, 29,31,32,35,36/03
95149	9	34,36,37,38,41,43,48,49, 52/02;8,9,19,24,25,27,30, 32,35,52/03
95151	17	34,36,37,38,40,47,50/02; 1,5,19,23,28,29,30,37/03

CHARTS AFFECTED BY NOTICE TO MARINERS
NM 33/02 THROUGH NM 1/04

Note: N indicates Not For Sale; P indicates Preliminary; T indicates Temporary;
* indicates New Edition/New Chart; ** indicates Chart Canceled

Chart No.	Ed. No.	Notice to Mariners No.
95152	5	37,38/02;6,9,19,28,30,31, 32,35/03
95153	2	34,36,37,38,43/02;19,25, 32/03
95160	13	41,42,47,52/02;1,6,8,9, 11,17,19,21,24,25,27,33, 36,40/03;1/04
95161	16	40,45,48,50/02;1,5,6,8,9, 10,17,19,23,25,27,30, 37/03
95162	2	40,44,47/02;10,14,19,30, 35/03
95163	2	1,6,9,10,13,14,17,21/03
95164	4	43,48/02;1,6,9,27/03
95167	10	44/02;1,6,9,11,14,17, 21/03
95169	2	44,50,52/02;11,16,23/03
95171	1	1,6,9,21,37/03
95172	1	1,9,21,32/03
95173	1	50,52/02;1,28/03
95174	1	50,52/02;12,27/03
95176	2	8,11,30,35/03
95177	1	41,50/02;9/03
95180	11	40,42,44,49/02;1,6,9,10, 21,23/03
95185	2	40,44,49/02;10,35/03
95200	6	23/03
95250	4	44/02;1,6,16,20,22,36/03
95255	2	44/02;1,7,13/03
95258	3	6,16,18/03
95261	7	48/02;1,5,9,16,23,28,36, 47/03
95262	13	41,46/02;1,6,9,27,36/03
95264	8	48/02;25/03
95267	5	13,20,23,26,36,49/03
95268	16	39,48/02;6,9,13/03
95270	4	48/02;9,10,13,20,21,22, 23,26,36,52/03
95271	4	44,48/02;9,10,12,13,20, 26,36/03
95273	2	48/02
95274	3	48/02;23,28,36,43/03
95276	4	1/04*
95280	9	48/02;8,20,26,52/03
95281	15	7,10,14,36,45/03
95282	7	46,52/02;4,6,9,19,20,22, 23/03
95285	3	18,20/03
95300	5	45,48,52/02;44/03
95320	15	35,38/02;20,21,26,33, 40/03
95341	8	42,47/02;1,10,40,44/03
95342	16	9,13,16,20/03
96004	14	44,45/02
96016	7	51/03
96020	4	41/02
96028	5	51/03
96032	3	38/02;34,51/03
96036	2	36/03
96039	7	23,44/03
96041	11	39,44,45/03
96042	11	10,21,39,40,44,45/03
96044	10	23,38,51/03
96120	6	21/03
96320	4	51/03
96340	4	45,51/03
96379	1	10/03
96381	2	10,50/03
96382	2	10,12,21/03
96400	4	12/03
96441	1	41/02;10,50/03
96480	3	41/02;51/03
96500	6	41/02;10,39/03
96520	7	10/03
96521	3	21/03
96540	5	10/03
96560	5	10,51/03
96580	3	10/03
96620	3	38/03
96621	5	10,38/03
96660	4	36/03
96760	4	35,45/02
96762	4	50/03*
96763	7	43,48/02;9,17,32,37, 45/03
96764	3	34/03*
96800	4	41/02
96901	3	7/03
96902	2	45/02
96904	3	34/03*
96910	1	10/03
96937	2	40/02
96938	4	4/03
96939	3	4,7,9,22/03
96941	8	47/02;47/03
96943	15	44/02;1,9,10,12,20,22,23, 33,42/03
96944	6	45,52/02;6,13,20/03
96945	3	43,52/02;20,22,23,42/03
96947	15	6,12,13/03
96948	8	21,22/03
96949	21	45/02;22/03
96960	3	7,47/03
96962	4	35/02;1,9,22,33/03
97000	3	17,40/03
97005	9	47/03
97021	7	40/03
97029	3	40/03
97040	5	43,47/02
97041	9	45,47/02;10,12,22/03
97042	7	14,20/03
97043	2	14,20/03
97060	8	46/02;12,14,22,26/03
97061	3	52/02
97062	12	44/02;6,10,22,26,34, 35/03
97063	2	48/03*
97064	2	6,14,33,45/03
97065	2	48/03*
97080	5	16,22,26/03
97082	5	46/02;16,34/03
97083	3	29,34,35/03
97100	4	42,47/02;16,17,26,49/03
97101	2	50/03*
97104	4	7,41/03
97105	3	41/03
97108	4	50/03*
97120	6	37,40,42,43/02;9,14,16, 17,25,40,44,45,49/03
97140	17	33,37,39,43,45/02;7,9,14, 16,25,40,44,45,46,49, 52/03
97141	5	40,46/02;8,13,20/03
97143	11	43,45/02;9,13,20,25,26, 44,49/03
97144	14	44*,46/02;7,8,9,13,20,39, 44,49/03
97145	1	43/02;8,9,25,40,45,47/03
97146	10	44/02*;15,39/03
97148	9	45/02;9,27/03
97149	20	34,35,44,45/02;1,16, 25/03
97150	13	34,39,43,44/02;20,27,42, 49/03
97151	16	35,44,45/02;12,13,14,16, 20,25,49/03
97152	9	1/04*
97153	8	52/03*
97154	2	36/02
97155	14	35,36,37,39,40,48/02;12, 13,18,20,28/03
97156	6	37/02;1,14/03
97157	2	40/03*;1/04
97158	5	50/03*
97159	6	33,39/02;7,14,16,44,46, 52/03
97163	14	14,36/03
97164	1	7,14,16,52/03
97165	1	7,16,52/03
97166	1	33/02;21,46/03
97167	2	33/02;21/03
97180	6	34,39,43,45,46,48/02;4,8, 13,20,22,26,44/03
97181	20	34,46,48/02;1,4,7,8,12, 13,14,17,18,20,22,23,26, 27,35,44,46/03;1/04
97182	13	34,39,46,48/02;1,4,5,6,7, 8,12,14,17,18,20,21,22, 23,27,35,46/03;1/04
97183	9	44/02;5,9,14,16,18,22,26, 43,44/03
97184	15	47/02;1,7,12,14,18,22,39, 44/03
97185	2	43/02;1,7,46/03
97187	3	44,48/02;9,18/03
97188	3	50/03*
97189	2	44/02;9,14,18,22,39, 43/03
97190	2	34,39,52/02;8,13/03
97200	9	52/02;8,16,17,22,25,26, 29/03
97201	7	18,28/03
97202	15	43,44,52/02;20,25/03
97204	9	45,52/02;4,6,10,19,20,25, 33,43,45,47/03
97205	3	18,28/03
97206	3	50/03*
97218	3	41/02;6,33/03
97219	4	6,9,13,20,23,25,47/03
97220	3	37,39,42,43,44/02;6,8,9, 17,18,23,29,33,46,49/03
97221	20	37,39,42,44,45,49,52/02; 6,8,9,10,13,17,18,19,20, 22,23,25,26,29,33,46/03
97222	12	47/02;10,22,29/03
97223	3	42,44,48/02;16,17,22,23, 46/03
97224	6	46,47,49/02;45/03
97225	31	37,39,42,44,45/02;6,8,9, 10,17,18,19,23,25,33,45, 46,49/03
97226	7	18,41/03
97227	11	42,43/02;9,18,30,34/03
97228	15	39,40,42,43/02;5,6,9,15, 17,18,20,21,22,27,29,35, 49,52/03
97229	12	36,39,47/02;6,8,9,18,28, 33/03
97230	18	36,52/02;6,9,28,33/03
97231	11	41/02;6,23,33/03
97232	8	22,25,33/03
97233	11	33,43,44,49/02;1,5,6,9, 15,16,23,33,35/03
97234	17	43,47,49/02;1,6,8,9,16, 41/03
97235	2	52/03*
97236	20	47/02;9,16,23,35,41/03
97237	6	41/03
97239	10	33/02;1,5,9,16,23/03
97241	6	10/03;1/04
97243	8	33,48/02;1,5,6,21,27, 33/03
97244	5	9/03
97245	11	36/02;1,5,9,29/03
97246	7	43,52/02;5/03
97251	4	6,10,17,36,52/03
97261	15	41/02;1,5,7,18,21,26, 44/03;1/04
97262	10	34/02;1,5,6,7,15,21,26, 33,46/03
97263	10	5,7,9,15,18,21,46/03
97266	5	37,41/02;1,5,6,7,14,15, 18,26,42/03;1/04
97267	16	40,41/02;1,5,6,8,10,13, 18,26,27,42/03
97268	10	6/03
97269	11	45/02;8,13,18,27/03
97270	6	36,44/02;1,5/03
97271	12	37,39/02;6,10,12,26,35, 41,44/03
97272	11	52/02;6,10,12,14,23,37, 47/03;1/04
97273	11	34*,52/03;1/04
97274	19	34,39,45/02;6,9,15,17,18, 23,37,47,52/03
97275	3	52/03*
97276	2	50/03*
97277	11	1,5,6,8,9,14,35,39/03; 1/04
97278	11	39/02;1,20,35,39,49/03
97279	9	9,27/03
97280	4	52/02
97281	3	50/03*
97283	3	45/02;9/03
97285	6	34,42/02;7,13,17,36/03
97286	6	34,35,36,41,42/02;6,8,10, 13,17,35,36,38/03
97287	5	34/02;20/03
97300	6	1,13,25,26/03
97303	3	47,48/02;45/03
97320	6	33/02;14,25,46/03
97340	8	33,38,52/02;16,17,18,22, 36,46,47/03
97341	9	34/02;16,21,47/03
97342	14	38/02;17,18,22,27,43/03
97343	12	38/02;17,25/03
97345	2	50/03
97360	6	38/02;5,7,13,18,27,43,45, 47/03
97380	7	39,47,52/02;1,2,8,16,23, 38,40,45/03
97381	7	7,13,27,43,45/03
97382	2	41,45/02;4,42/03
97383	16	5,7,13,42,46,47/03
97384	4	47/02;19/03
97385	10	52/02;5,6,7,9,46,47/03
97387	2	4,5,7,42,46/03
97389	2	45*,47/03
97390	5	39,40/02;2,5,12,16,36/03
97391	26	6,7,12,16/03
97392	5	1,21,23,26,33,38/03
97396	14	36,39,40/02;2,16,17,23, 33,38/03
97397	7	39,49/02;16,26,44,49/03
97398	4	43/03*
97400	4	34*,44,49/03
97410	9	50/03*
97412	7	40/02;47/03
97420	17	34,39,42,47,52/02;1,8,10, 33,38,40,45/03;1/04
97421	13	35,36/02;1,10,13,20,26, 36/03
97423	2	35,36/02;1,13,20,26, 36/03
97425	6	34,39,47,52/02;1,6,8,10, 45/03;1/04
97440	8	52/02;1,16,19,27,43, 47/03
97441	5	46/02;47/03
97443	6	15,19,25,47/03
97460	7	40/02;5,19,21,47/03
97461	9	5,8,19,21,22,23,26/03
97465	9	1,6,8,19,20,22,33,37/03
97466	2	46/02;1,23,27/03
97469	10	1,6,8,19,20,22,33,37/03
97471	5	N22,N33/03
97472	8	34/02;33/03
97474	7	22/03
97480	7	35,52/02;3,9,10,17,18, 21/03
97481	6	47,49/02;9,18,20/03
97483	7	48,52/02;20/03
97521	6	42/02;16,18,20/03
97564	3	16/03
800669	8	N1/04
800744	1	N49/02;N5,N12,N13, N16,N36,N47,N50/03
801217	1	N6,N8,N19,N20,N22, N33,N37/03
801885	3	N34/03
801902	9	N25,N31/03
801953	1	N39,N52/03
802202	8	N35/02;N1,N7/03
802260	5	N1/04
804059	2	N43/03
804567	4	N31/03
805118	3	N12,N36/03
805647	2	N37,N51/02;N30/03
806927	8	N25,N30,N39/03
807370	5	N17,N25,N30,N31, N39/03
807861	2	N22/03
808365	2	N14/03
809055	7	N16/03
809310	9	N39/02
809679	2	N50/02;N12,N27/03

NGA HYDROGRAPHIC PRODUCTS CATALOG CORRECTIONS

Note: Underlining indicates that column in which a correction has been made or new information added.			Edition				
NGA Ref. No. (National Stk. No.)	Title	Scale = 1:	No.	Date	Price Category	Page(s)	NTM
	REGION 1						
18BCO18448 (7642014011545)	Puget Sound-Southern Part	80,000	33	9/03	NOS	1-98	1/04
	REGION 5						
53BHA53262 (7642014006225)	Cagliari	17,500	8	10/03	A	5-26,42	1/04
	REGION 9						
95BHA95276 (7642014014196)	Kanazawa-ko	10,000	4	10/03	A	9-26,43	1/04
97XHA97152 (7642014014395)	Southern Part of Chiba Ko	15,000	9	10/03	A	9-34,43	1/04
	MISCELLANEOUS CHARTS AND PUBLICATIONS						
DNCDX003 (7644014398358)	Indian Ocean		12	10/03	DS	10-43	1/04
DNCDXVDU (7644014946812)	Digital Nautical Chart (DNC) - VPF Database Update (VDU)		21	10/03	DS	10-43	1/04
NOSPBTCTATCSTN4 (7642015129683)	Atlantic Coast of North America, 2004				DS	10-25	1/04
NOSPBTCTPACAS4 (7642015129684)	Pacific Coast of North America and Asia, 2004				DS	10-25	1/04
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DS Distribution Limited
GPO Government Printing Office
NOS National Ocean Service
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SAILING DIRECTIONS CORRECTIONS

PUB 160 2 Ed 2002 LAST NM 51/03

Page 88—Lines 38 to 47/R; read:
Rescue Operations (SAR) in the Indian Search and Rescue Region (ISRR). For the limits of the ISRR, see Ship Reporting System—INDSAR.

The ISRR is divided into three subregions, each with an assigned Maritime Rescue Coordination Center (MRCC) and several assigned Maritime Rescue Coordination Subcenters (MRSC). Many centers can be reached by e-mail, as follows:

Western Region

MRCC Mumbai	cgmumbai@bon3.vsnl.net.in
MRSC Porbandar	comdislad1@sancharnet.in
MRSC Goa	cgaegoa@goate.com
MRSC New Mangalore	cgman@sancharnet.in
MRSC Kochi	—

Eastern Region

MRCC Chennai	isareast@md3.vsnl.net.in
	cgpoorav@md2.vsnl.net.in
MRSC Tuticorin	cgstuti@sancharnet.in
MRSC Vizag	dhq6@md4vsnl.net.in
MRSC Paradip	cgdhqpdp@dte.vsnl.net.in
MRSC Haldia	cgdhq8@cal2.vsnl.net.in
MRSC Mandapam	cgsmp@md5.vsnl.net.in

Andaman and Nicobar Region

MRCC Port Blair	pblcgrhqan@sancharnet.in
MRSC Diglipur	—
MRSC Campbell Bay	—

Ship Reporting System—INSPIRES
(BA NP 285; BA NM 49/03, Section VI) 1/04

Page 140—Lines 25 to 26/R; read:
and keep a continuous watch on 2182 kHz as necessary.
(BA NP 286(3)) 1/04

Page 140—Line 53/R; read:
when calling the harbormaster, pilot station, the East Mole Signal Station, or other
(BA NP 286(3)) 1/04

Page 204—Line 14/R; insert after:
It has been reported (2003) that vessels calling at ports in Sharjah and Sharjah waters should appoint a local agent to advise the port of the vessel's ETA, particulars, and purpose of call.
(PUBS 016/03) 1/04

Page 205—Line 7/L; insert after:
Pilotage 206
(NGA) 1/04

Page 206 to Page 208—Table; replace with below:
New table titled **Maritime Movement Control and Information System Reporting Points** from back of this Subsection.
(BA NP 286(5)) 1/04

Page 206—Line 3/R; insert after:
Pilotage

Pilotage is compulsory W of Montevideo. Pilots board S of Lighted Buoy Km 9.35 in position 35˚00.0'S, 56˚13.5'E. Deep draft vessels bound for Uruguayan river ports may be directed to obtain a pilot further E of the above position.
(BA NP 286(5)) 1/04

Page 208—Line 5/R; insert after:
Spanish or English should be used when communicating with the Control Centers. Reports should be made by telex if VHF contact is not made. A log of all reports made should be maintained.
(BA NP 286(5)) 1/04

PUB 172 9 Ed 2001 LAST NM 51/03

Page 190—Lines 18 to 28/R; read:
be sent via fax (+98(0)21-8716345) to Production and Planning and Export Coordination (attention Sirri Marine) 96 hours and 48 hours in advance.

Vessels should start contacting the terminal on VHF channel 16 beginning 4 hours before arrival.

Vessels may not enter the port limits without a pilot on board.
(BA NM 48/03, Section VI) 1/04

Page 199—Lines 15 to 19/R; read:
Regulations.—The vessel's ETA should be sent via fax (+98(0)21-8716345) to Production and Planning and Export Coordination (attention Lavan Marine) 96 hours and 48 hours in advance. The message should include cargo,
(BA NM 48/03, Section VI) 1/04

Page 207—Line 22/R; read:
Al Hamriyah.

Caution.—Reclamation work, marked by buoys, is in progress (2003) within 1 mile of the harbor. For a minimum distance of 2 miles from the harbor, arriving vessels should maintain a track of not less than 120˚, while departing vessels should maintain a track of not less than 300˚. Vessels

PUB 172 (Continued)

will pass NE of the spoil ground produced by the reclamation work.

(BA NM 48/03, Section IV) 1/04

Page 210—Line 18/L; insert after:

Major reclamation is also in progress (2003) centered in an area about 5.5 miles SSW of Dubai Drydock Harbor main breakwater head. A prohibited area, with a radius of 3 miles, is centered on position 23˚13.5'N, 55˚10.0'E.

(BA NM 48/03, Section IV;
48(5207(P))03 Taunton) 1/04

Page 245—Lines 40 to 49/L; read:

Pilotage.—Pilotage is compulsory. Mooring Masters, acting as pilots, board tankers about 2 miles SE of the storage tanker and remain aboard at the loading berth to advise on loading.

Regulations.—The national flag of Iran must be displayed while at the terminal and within Iranian territorial waters.

Quarantine officers will board tankers at the berth. The standard quarantine message should be sent 24 hours before arrival.

The terminal can be contacted on VHF channel 72 and by e-mail, as follows:

fsu001@iooc.net
fsu999@iooc.net

Vessels must send their pre-arrival information to the terminal 7 days prior to the accepted range or ETA, whichever is earlier. The vessel's ETA must be sent via fax (+98(0)21-8716345) to Production and Planning and Export Coordination (attention Bahregan Marine) 96 hours and 48 hours in advance. Vessels must also send their ETA to the terminal 72 hours, 48 hours, and 24 hours in advance.

Vessels should start contacting the terminal on VHF channel 72 beginning 4 hours prior to arrival.

(BA NM 48/03, Section VI) 1/04

Page 259—Lines 17 to 33/R; read:

Pilotage.—Pilotage is compulsory. Vessels wait for a pilot about 2 miles S of the terminal.

Regulations.—Vessels should send their ETA via fax (+98(0)21-8716345) to Production and Planning and Export Coordination (attention Bahregan Marine) 96 hours and 48 hours in advance.

All ships must display the Iranian national flag from the foremast while in the territorial waters of Iran.

Vessels should start contacting the terminal on VHF channel 11 beginning 4 hours prior to arrival.

Anchorage.—Anchorage can be taken in suitable depths

(BA NM 48/03, Section VI) 1/04

PUB 195 7 Ed 2002 LAST NM 49/03

Page 31—Lines 4 to 40/R; read:

2.24 Primorsk (60˚22'N., 28˚38'E.) (World Port Index No. 28360), a small port and oil terminal, is situated along the shores of an enclosed bay at the E side of Proliv Byerkezund.

Ice.—In severe conditions, icebreaker assistance is provided. Generally, the ice season lasts from the beginning of December to the end of April. The maximum ice coverage occurs in March.

The Captain of the Port of St. Petersburg directs all icebreaker operations. Vessels requiring assistance should send a request via their agent 24 hours in advance.

During the period of ice navigation, vessels proceeding to the port are advised to send their ETA at the designated convoy position to the Port Captain at Primorsk 48 hours, 24 hours, and 12 hours in advance. On approaching the convoy position, vessels should establish VHF contact with the nearest icebreaker and follow instructions. Vessels should advise Primorsk VTS (SUDS) the times of commencement and completion of icebreaker pilotage.

Depths—Limitations.—The harbor is protected by breakwaters and has depths of 5.5 to 9m, decreasing gradually toward the shore. There are two piers with depths of 8.5 and 9.4m alongside their heads.

The oil terminal consists of a T-shaped jetty, which extends about 0.2 mile SW from the shore, and several mooring buoys. The head of the jetty has depths of 17.7 to 18m alongside. The root of the jetty has a depth of 7.4m alongside. Vessels up to 150,000 dwt and 15m loaded draft can be handled.

Aspect.—A church with a prominent spire stands on the N side of the harbor entrance.

It is reported (2002) that the Safety Fairway is marked by lighted buoys and is indicated by a lighted range.

Pilotage.—Waiting Area No. 6, which may best be seen on the chart, is situated 3 miles W of Ostrov Rodsher (59˚58'N., 26˚41'E.). Pilotage is compulsory for vessels of 50,000 dwt and over between this waiting area, or the entrance of the TSS located about 9 miles E of Ostrov Rodsher, and the port.

Waiting Area No. 7, which may best be seen on the chart, is situated about 11 miles NE of Ostrov Seskar (60˚02'N., 28˚23'E.), on the NW side of the Safety Fairway. Pilotage is compulsory for vessels of less than 50,000 dwt between this waiting area, or the beginning of the second reach of the Safety Fairway, and the port.

Tug service is compulsory between Waiting Area No. 7 and the port for vessels in ballast, and between Ostrov Seskar and the port for loaded vessels.

Pilots can be contacted by VHF (channels 9 and 67) and board, as follows:

1. Vessels of 50,000 dwt and over—in position 59˚59.8'N, 26˚40.0'E (about 3 miles S of the S extremity of Ostrov Gogland).
2. Vessels of less than 50,000 dwt—close SSE of Waiting Area No. 7 (60˚10'N., 28˚37'E.).
3. In position 60˚08.0'N, 28˚10.0'E (between Nos. 5 and 6 Lighted Buoys).
4. Vessels proceeding SE through Proliv Byerkezund—in position 60˚22.0'N, 28˚34.5'E.
5. Vessels proceeding NW through Proliv Byerkezund—in position 60˚14.7'N, 28˚50.8'E.

PUB 195 (Continued)

Vessels should sent an ETA at Waiting Area No. 7, via the agent, to the Port Captain 48 hours and 24 hours in advance. This ETA should be confirmed by VHF 4 hours prior to arrival.

Vessels should sent a request for pilotage to the Port Captain 24 hours before arriving at the appropriate boarding position. This request should be confirmed by VHF 2 hours in advance.

Any changes should be sent via the agent not less than 1 hour 30 minutes in advance.

Vessels transiting the port area should contact the Port Captain by VHF 2 hours prior to arriving at the appropriate boarding position in Proliv Byerkezund.

Departing vessels should request pilotage in writing or by telephone not less than 2 hours before sailing.

Regulations.—A Vessel Traffic Service (VTS) system operates in the port area and includes the Safety Fairway, Waiting Area No. 7, the inner and outer roadsteads, and the waters of Proliv Byerkezund S of latitude 60˚25'N.

Vessels must contact the Traffic Control Center of the Primorsk VTS (SUDS) on VHF channel 68 (reserve channel 13) 1 hour before entering the VTS area.

Vessels must, on request, advise the Traffic Control Center of their bearing and distance from Seskar Light (60˚02'N., 28˚22'E.).

Vessels should maintain a continuous listening watch on VHF channel 68.

Vessels proceeding to Proliv Byerkezund should establish VHF contact with Primorsk VTS when 30 miles from the port to request permission to enter the area.

Tankers bound for the port in winter are required to be double-hulled.

In addition to regular navigation equipment, tankers are required to be fitted with an Electronic Chart Display and Information System (ECDIS) and a Satellite System (GPS/GLONASS). If these systems are not available, they may be provided by the pilot service.

(BA NP 20; BA NP 286) 1/04

Page 113—Line 53/R; read:

5.3m during daylight, leads through Pitsundet to this harbor.

(BA NP 20) 1/04

COAST PILOT CORRECTIONS

COAST PILOT 1 33 Ed 2003 Change No. 21
LAST NM 48/03

Page 141—Paragraph 120, line 8 to Paragraph 121, line 1; read:

water and is equipped with a racon.

This buoy is located inside the traffic separation ...

(11/03 CG1; NOS 13200) 1/04

Page 214—Paragraph 363, lines 6 to 16; read:

but contracts to 100 yards 1.3 miles above. In January 2003, the controlling depths were 4.5 feet in the dredged entrance channel to abeam of Horton Rocks, about 1 mile above the entrance on the west side of the channel, thence 4.4 feet in midriver for about 1.6 miles, thence 4.7 feet in the upper dredged section for about 0.8 mile to the turning basin just above and east of Black Point, and thence in May 2003, 4.1 to 4.5 feet in the basin at the head of the project at Ellsworth. Freshets occur in the spring occasionally. Ice ...

(12/03 CG1; CL 407/03; BPs 179958-64; NOS 13316; BP 181421) 1/04

Page 229—Paragraph 161, lines 5 to 6; read:

westward of No Mans Land.

(49/00 CG1; LL/03) 1/04

Page 230—Paragraph 163, line 1; read:

A lighted bell buoy, 0.7 mile north of Manticus Island, ...

(49/00 CG1; LL/03; NOS 13302) 1/04

Page 292—Paragraph 505, lines 5 to 6; read:

northwest one uncovers about 3 feet and is also marked by a buoy.

(CL 696/02; NOS 13290) 1/04

Page 340—Paragraph 521, line 2; read:

Island and the lighted buoy marking ...

(23/03 CG1; LL/03) 1/04

Page 385—Paragraph 49, lines 15 to 27; read:

the town wharf. In November 2002 - June 2003, the controlling depth in the entrance channel was 7.3 feet (8 feet at midchannel) to the seaward end of the east jetty; thence 2 feet in the left outside quarter and shoaling to bare in the remainder of the channel to the anchorage basin, thence 3 feet in the eastern half of the channel except for shoaling to less than 1 foot along the western edge of the channel near the mouth of Cut River; thence 2 to 5 feet in the south and west portions of the turning basin with shoaling to bare in the northeast corner. Depths of 2 to 4 feet were available in the anchorage basin except for shoaling to 1.5 feet in the northeast corner. Local fishermen adjust their arrival ...

(CL 1434/03; BPs 181403-04) 1/04

COAST PILOT 5 31 Ed 2004 Change No. 3
LAST NM 52/03

Page 343—Paragraph 359, lines 6 to 7; read:

19, the main coastal highway. **Horseshoe Beach Approach Light 2** (29˚23'16"N., 83˚20'24"W.), 16 feet ...

(39/03 CG7; LL/03) 1/04

Page 602—Paragraph 517, line 1; read:

Isla Caja de Muertos Light (17˚53'35"N., 66˚31'16'W.), ...

(44/03 CG7; LL/03) 1/04

Page 647—Paragraphs 250 to 264; read:

Key West, FL: 3535 S. Roosevelt Boulevard 33040.

Lake Charles, LA: 500 Airport Boulevard 70607.

New Orleans/Baton Rouge, LA: 62300 Airport Rd., Slidell, LA 70460.

San Juan, PR: 4000 Careterra 190, Carolina, PR 00979.

COAST PILOT 5 (Continued)

Brownsville, TX: 20 South Vermillion Road 78521.

Houston/Galvaston, TX: 1620 Gill Rd., Dickinson TX 77539.

(Internet/03) 1/04

COAST PILOT 6 33 Ed 2003 Change No. 23
LAST NM 52/03

Page 311—Paragraph 60, lines 6 to 12; read:

ends of the breakwaters are marked by lights. In August 2003, the controlling depth was 11.3 feet in the entrance channel and between the breakwaters to the harbor basin, with 9 to 10 feet in the N section (except for lesser depths to 7 feet along the N and W edges) and 4.7 to 6 feet in the S section of the basin.

(DD 4708) 1/04

Page 311—Paragraph 69, lines 6 to 11; read:

harbor. In November 2002-September 2003, the controlling depths were 20 feet in the entrance channel (except for shoaling to 13.6 feet in a large area in the SW corner of the channel), thence 17 to 20 feet in the buoyed section on the SW side of the basin (except for depths of 14 to 16 feet in the N corner); thence in November 2001, depths in the remainder of the basin on the NE side were 13 to 16 feet with gradual shoaling to 6 feet towards the NW end.

(DD 4592) 1/04

Page 314—Paragraph 103, lines 7 to 13; read:

and a private **113.5˚** lighted range. In July 2003, the controlling depths were 7.7 feet (8.2 feet at midchannel) in the entrance channel to the outer end of the breakwater, thence 2.3 feet in the left half with shoaling to bare in the right half of the channel to the mouth of the river, thence 4.5 feet (6.6 feet at midchannel) to the head of the project.

(DDs 4548-49) 1/04

Page 314—Paragraph 111, line 3; read:

channels. In September 2003, the controlling depth was 2.3 feet in ...

(DDs 4576-80) 1/04

Page 314—Paragraph 114, lines 4 to 6; read:

800 feet below the CSX railroad bridge. In June 2003, the controlling depth was 2.2 feet in the entrance channel to the head of project.

(DDs 4701-06) 1/04

Page 322—Paragraph 194, lines 5 to 9; read:

signal is at the N light. In September 2003, the controlling depths were 5.3 feet in the entrance channel and between the piers to the boat ramp on the S side of the channel, thence 4.1 feet to the bridge.

(DD 4709) 1/04

Page 356—Paragraph 188, line 6; read:

September 2003, the controlling depth was 7.5 feet (9.2 ...

(DD 4629) 1/04

Page 356—Paragraph 197; read:

In September-October 2003, the controlling depths in the dredged channel were 15 feet in the left half and 22.5 feet in the right half of the entrance to the lakeward end of the S pier (except for shoaling to 14.4 feet in the right outside quarter just NW of the South Pierhead Light), thence 18 feet (22.7 feet at midchannel) to Manistee Lake (except for shoaling to 7.6 feet in the right half of the channel, beginning about 0.4 mile above the mouth and continuing about 750 feet upriver.)

(DDs 4595-98) 1/04

Page 425—Paragraph 762, line 7; read:

channel leads to two inner basins. In August 2003, the ...

(DD 4594) 1/04

Page 425—Paragraph 768, lines 6 to 8; read:

August 2003, the controlling depth was 6.6 feet in the entrance channel to the launching ramp. Transient berths, gasoline, ...

(DD 4594) 1/04

COAST PILOT 8 25 Ed 2003 Change No. 13
LAST NM 51/03

Page 169—Paragraph 190, lines 2 to 4; read:

close SW of the City Pier. In April 2003, the controlling depth was 10 feet in the entrance channel and basin with lesser depths in the SW corner of the basin and along the edge of the basin about 100 yards SE of the entrance light. The entrance ...

(BP 181371) 1/04

Page 169—Paragraph 191, lines 2 to 5; read:

breakwaters, is 0.3 mile W of Village Point. In April 2003, the controlling depth was 12.8 feet in the entrance, thence 12.5 feet in the W section of the basin and 8.6 feet in the E section except for lesser depths along the ...

(BP 181372) 1/04

Page 216—Paragraph 303, lines 5 to 9; read:

basin is 11 feet. In April 2003, the entrance channel had a controlling depth of 9.0 feet (10 feet at midchannel), thence 10.0 feet in the basin except for lesser depths along the edges. A **048º** range and a light on the ...

(BP 181486) 1/04

Page 367—Paragraph 38, lines 3 to 7; read:

extend from the shore S of the breakwater.

(NOS 17303) 1/04

Page 367—Paragraph 42 to Paragraph 45, line 2; read:

Pelican Seafoods Dock (57º57'34"N., 136º13'53"W.): 140-foot face, 18 feet reported alongside; 2.5 -ton hoists; shipment and receipt of containerized and conventional cargo, seafood, ice and the handling of supplies for fishing vessels.

Pelican Seafoods Service Pier (57º57'35"N., 136º13' 51"W.): about 40 yards E of Seafoods Dock; 20-foot face; 75-foot W side; 60-foot E side; 10 feet reported alongside; 0.5-ton hoist, handling supplies for fishing vessels.

COAST PILOT 8 (Continued)

Pelican Seafoods Crab Dock (57º57'35"N., 136º13'48"W.): about 75 yards E of Seafoods Dock; 95-foot face; 15 feet reported alongside; 3-ton hoist; receipt and shipment of crabs and handling supplies for fueling vessels.

Pelican Seafoods Fuel Dock (57º57'36"N., 136º13'46"W.): just E of Crab Dock; 60-foot face; 30 feet both E and W sides; 12 feet reported alongside; receipt of petroleum products for fueling vessels.

Pelican Ferry Terminal Dock (57º57'28"N., 136º13'38"W.): on the NW side of the breakwater; 20 ...
(PS 38/95) 1/04

Page 368—Paragraph 48, line 5; read:
provide about 3,600 feet of float space. In May 2003, 12 ...
(BP 181487) 1/04

Page 369—Paragraph 65, lines 5 to 6; read:
2003, a depth of 7.7 feet (10 feet at midchannel) was available in the N channel and 7.8 feet (8 feet at midchannel) was available in the S channel.
(BP 181373) 1/04

NOS TIDE TABLES CORRECTIONS

EAST PACIFIC Ed 2004 NEW EDITION
(NOS) N1/04

EUROPE/WEST AFRICA Ed 2004 NEW EDITION
(NOS) N1/04

W PACIFIC/INDIAN OCEAN Ed 2004 NEW EDITION
(NOS) N1/04

WEST ATLANTIC Ed 2004 NEW EDITION
(NOS) N1/04

TIDAL CURRENT TABLES CORRECTIONS

ATLANTIC Ed 2004 NEW EDITION
(NOS) N1/04

PACIFIC Ed 2004 NEW EDITION
(NOS) N1/04

Maritime Movement Control and Information System Reporting Points				
Port Control Center	**Call sign**	**Zone**	**Geographic area**	**Reporting points**
La Paloma	La Paloma Control	Kilo	East of longitude 54˚15'W	Abeam of Chui Light Abeam of Cabo Polonio Light Abeam of Cabo Santa Maria
La Paloma	La Paloma Control	Lima	Port area	Abeam of Port Jetty Light
Punta del Este	Punta del Este Control	Golf	Between longitudes 54˚15'W and 55˚30'W	Abeam of Isla de Lobos Abeam of Punta del Este
Punta del Este	Punta del Este Control	Hotel	Port area	—
Piriopolis	Piriapolis Control	Tango	Port area	—
Puerto del Buceo	CWC47	Oscar	Between longitudes 56˚00'W and 56˚09'W north of latitude 34˚57'S	—
Montevideo	Montevideo Port Control	Alfa	Outer zone between longitudes 55˚30'W and 57˚21'W	Middle Channel: 1. Abeam of Graf Spee Lighted Buoy 2. Abeam of La Panela Light 3. Uruguayan Banco Ortiz Lighted Buoy 4. Argentinian Banco Ortiz Lighted Buoy North Channel: 1. Abeam of Graf Spee Lighted Buoy 2. Abeam of La Panela Light 3. Abeam of Jesus Maria Lighted Buoy 4. Abeam of Arazati Lighted Buoy 5. Abeam of Punta Rosario East of the Access Channel: 1. Abeam of Punta Brava 2. Abeam of Isla de Flores
Montevideo	Montevideo Port Control	Bravo	Port area between longitudes 56˚10'W and 56˚19'W north of latitude 35˚01'S	Abeam of Fairway Entrance Lighted Buoy Abeam of the jetty
Santiago Vasquez	CWC38	Papa	Between longitudes 56˚20'W and 56˚40'W north of latitude 34˚56'S	—
Puerto Sauce	CWC27	Uniform	Outer zone	—
Colonia	Colonia Control	Charlie	Outer zone	Abeam of Punta Rosario Abeam of Puerto Sauce Abeam of Roca Barriles Abeam of Puerto Colonia del Sacramento Abeam of Isla Farallon North end of Barra de San Pedro Abeam of Punta Martin Chico
Colonia	Colonia Control	Delta	Port area	—

Maritime Movement Control and Information System Reporting Points				
Port Control Center	**Call sign**	**Zone**	**Geographic area**	**Reporting points**
Carmelo	CWC22	Quebec	Outer zone	Abeam of Carmelo
Nueva Palmira	CWC31	Echo	Outer zone	—
Nueva Palmira	CWC31	Foxtrot	Port area	—
Fray Bentos	Frey Bentos Control	India	Outer zone	Abeam of Km 46 (Punta Amarilla) Abeam of Km 61 (Riacho Yaguari) Abeam of Km 67 Abeam of Km 83 (Paso Barrizal) Abeam of Puerto Fray Bentos Passing Ponte General San Martin Abeam of Km 122 (Nuevo Berlin) Abeam of Km 140 (Isla Roman)
Fray Bentos	Frey Bentos Control	Juliet	Port area	—
Paysundu	Paysundu Control	Mike	Outer zone	Abeam of Km 140 (Isla Roman) Abeam of Km 160 (San Javier) Abeam of Km 83 (Concepcion del Uruguay) Abeam of N end of Isla Punta Almiron Abeam of Puerto Paysandu Passing Ponte General Artigas Abeam of Punta Piedras Abeam of Arroya Malo
Paysundu	Paysundu Control	November	Port area	—
Salto	CWC37	Romeo	Outer zone	—
Salto	CWC37	Sierra	Port area	—

PUB 160

CORRECTIONS TO C. G. LIGHT LIST, VOLUME II LIGHT LIST, 2003

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
860 30316	*Cape Fear River Entrance* *Lighted Whistle Buoy CF*	33 48 17 N 78 03 02 W	**Mo (A) W**		6	Red and white stripes with red spherical topmark.	RACON: C(– • – •). On channel centerline.	
		*				*	*	1/04
12480	- CHANNEL LIGHT 107	37 18 44 N 77 13 56 W	**Fl G** 6s	15	4	SG on multi-pile structure.	Ra ref.	
		*						1/04
12515	- CHANNEL LIGHT 112 175 feet outside channel limit.	37 18 26 N 77 15 31 W	**Fl R** 4s	15	4	TR on multi-pile structure.		
	*							1/04
	***Add Heading:** ***Upper Choptank River**							
25315	- Channel Daybeacon 80					TR on pile.		
								1/04
*25316.01	Upper Choptank River Buoy 1	38 53 25 N 75 49 58 W					Private aid.	
								1/04
*25316.02	Upper Choptank River Buoy 2					Red nun.	Private aid.	
								1/04
*25316.03	Upper Choptank River Buoy 3					Green can.	Private aid.	
								1/04
*25316.04	Upper Choptank River Buoy 4					Red nun.	Private aid.	
								1/04
*25316.05	Upper Choptank River Buoy 5					Green can.	Private aid.	
								1/04
*25316.06	Upper Choptank River Buoy 6					Red nun.	Private aid.	
								1/04
*25316.07	Upper Choptank River Buoy 8					Red nun.	Private aid.	
								1/04
*25316.08	Upper Choptank River Buoy 10					Red nun.	Private aid.	
								1/04
*25316.1	Upper Choptank River Buoy 13					Green can.	Private aid.	
								1/04
*25316.11	Upper Choptank River Buoy 15					Green can.	Private aid.	
								1/04
*25316.12	Upper Choptank River Buoy 17					Green can.	Private aid.	
								1/04

Note: *Asterisks* (*) *indicate that column(s) in which a correction has been made or new information added.*
Denotes a new entry when preceding the station number.

CORRECTIONS TO C. G. LIGHT LIST, VOLUME II LIGHT LIST, 2003

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
*25316.13	Upper Choptank River Buoy 19					Green can.	Private aid. 1/04
*25316.14	Upper Choptank River Buoy 20					Red nun.	Private aid. 1/04
*25316.15	Upper Choptank River Buoy 22					Red nun.	Private aid. 1/04
*25316.16	Upper Choptank River Buoy 23					Green can.	Private aid. 1/04
*25316.17	Upper Choptank River Buoy 23					Green can.	Private aid. 1/04
*25316.18	Upper Choptank River Buoy 27					Green can.	Private aid. 1/04
*25316.19	Upper Choptank River Buoy 29					Green can.	Private aid. 1/04
*25316.2	Upper Choptank River Buoy 30					Red nun.	Private aid. 1/04
29335	- CHANNEL RANGE FRONT LIGHT	34 42 13 N 76 39 47 W	**F W** (Day) **Q G** (Night)	15		Skeleton tower on platform.	Visible on range line only. Lighted throughout 24 hours. * 1/04
29340	- CHANNEL RANGE REAR LIGHT 1,125 yards, 009.5° from front light		**F W** (Day) **F G** (Night)	55		Skeleton tower on platform.	Visible on range line only. Lighted throughout 24 hours. * 1/04
29430	- RANGE FRONT LIGHT	34 41 30 N 76 39 43 W	**Q W** *	18		On skeleton tower.	Lighted throughout 24 hours. DAY: Visible on rangeline only. NIGHT: Visible all around; higher intensity on rangeline. * 1/04
29435	- RANGE REAR LIGHT 640 yards, 127° from front light.		**F W** *	40		On skeleton tower.	Lighted throughout 24 hours. DAY: Visible on rangeline only. NIGHT: Visible all around; higher intensity on rangeline. * 1/04
	***Add Headings and Note:** ***CAPE FEAR RIVER (Chart 11537)** ***Cape Fear River** **Buoys located 50 feet outside channel limit.*						
30310	CAPE FEAR RIVER ENTRANCE RANGE FRONT LIGHT	33 52 24 N 78 01 09 W	**Iso W** 2s (Day) **Iso W** 2s (Night) *	20 23 *	*	Skeleton tower on platform. *	Visible all around: Higher intensity on rangeline. Lighted throughout 24 hours. * 1/04

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CORRECTIONS TO C. G. LIGHT LIST, VOLUME II LIGHT LIST, 2003

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
30312	CAPE FEAR RIVER ENTRANCE RANGE REAR LIGHT 2,420 yards, 013.5° from front light.		**Iso W** 6s (Day) **Iso W** 6s (Night)	98 101		Skeleton tower on platform.	Visible on range line only. Lighted throughout 24 hours.	
	*		*	*	*	*	*	1/04
*30313	CAPE FEAR RIVER ENTRANCE RANGE REAR PASSING LIGHTS (2)		**Fl W** 4s	20	4	On same structure as Cape Fear River Entrance Range Rear Light.	Visible all around. Lighted only at night.	
								1/04
	***Delete Headings and Note:** ***CAPE FEAR RIVER (Chart 11537)** ***Cape Fear River**							
	**Buoys located 50 feet outside channel limit.*							
30316 860	*- Entrance Lighted Whistle Buoy CF*	33 46 17 N 78 03 02 W	**Mo (A) W**		6	Red and white stripes with red spherical topmark.	RACON: C (– • – •). On channel centerline.	
		*				*	*	1/04
30317	*- Channel Lighted Buoy 1*						*Remove from list.*	
							*	1/04
30355	*- Channel Lighted Buoy 9*		**Fl G** 2.5s		4	Green.		
			*					1/04
30360	*- Channel Lighted Buoy 10*		**Q R**		4	Red.		
			*					1/04
30370	*- Lighted Buoy 11*		**Fl G** 4s		4	Green.		
	*		*					1/04
*30372	*- Lighted Buoy 12*		**Fl R** 2.5s		3	Red.		
								1/04
*30373	*- Lighted Buoy 13*		**Q G**		3	Green.		
								1/04
30395	*- Lighted Buoy 13A*		**Fl G** 4s		4	Green.		
	*							1/04
33490	CEDAR ISLAND NORTH LIGHT	35 02 08 N 76 20 54 W	**Fl W** 6s	24	5	On multi-pile structure.	Maintained for Marine Corps Air Station.	
							*	1/04
*33598	- Shoal Warning Daybeacon					NW on pile worded DANGER SHOAL.		
								1/04

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Denotes a new entry when preceding the station number.

CORRECTIONS TO C. G. LIGHT LIST, VOLUME II LIGHT LIST, 2003

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
	Turnagain Bay							
33627	- WRECK LIGHT WR1	35 01 19 N 76 29 58 W	**Q G**	15	3	SG on pile.	Marks submerged barge.	
	*							1/04
34300	- Daybeacon 14					TR on pile.		
						*		1/04
34475	- LIGHT 22		**Fl R** 2.5s	15	3	TR on pile.		
							*	1/04
	Bay River							
38245 33400	- LIGHT 1	35 09 48 N 76 32 01 W	**Fl G** 4s	14	3	SG-TY on pile.		
							*	1/04
*38277	- Shoal Warning Daybeacon					NW on pile worded DANGER SHOAL.		
								1/04
	Russell Slough							
38440	- JUNCTION LIGHT RS	34 45 21 N 76 40 22 W	**Fl (2+1) G** 6s	15	3	JG on multi-pile structure		
						*		1/04
38475 34855	- CHANNEL JUNCTION LIGHT RG						*Remove from list.*	
							*	1/04

CORRECTIONS TO C. G. LIGHT LIST, VOLUME III LIGHT LIST, 2003

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
	Bloody Point Range							
4580	*- Lighted Bell Buoy 8*		**Q R**		3	Red.		
	*							1/04
21520	- Daybeacon 14		**Fl R** 4s	16	3	TR on pile.		
	*							1/04
	Big Sarasota Pass							
21570	- Daybeacon 16	27 18 18 N 82 33 36 W	**Fl R** 2.5s	16	3	TR on pile.		
	*							1/04
21580	- Daybeacon 19		**Fl G** 4s	16	4	SG on dolphin.		
	*							1/04

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Denotes a new entry when preceding the station number.

CORRECTIONS TO C. G. LIGHT LIST, VOLUME III LIGHT LIST, 2003

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
33725.5	- Buoy 24B						*Remove from list.*
							* 1/04
*39060.1	- Daybeacon 6A					TR on pile.	
							1/04
*39061	- Daybeacon 7					SG on pile.	
							1/04
*39062	- Daybeacon 8					TR on pile.	
							1/04
*39062.1	- Daybeacon 9					SG on pile.	
							1/04
*39063	- Daybeacon 10						
							1/04
39065	- Daybeacon 10A					TR on pile.	
	*					*	1/04
*55297	- Daybeacon 11A					SG on pile.	
							1/04

CORRECTIONS TO C. G. LIGHT LIST, VOLUME IV LIGHT LIST, 2003

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
	TAMPA BAY TO CAPE SAN BLAS (Chart 11400)						
	U.S. Air Force Instrumentation Towers						
20	- Light SMI	29 04 54 N 84 19 12 W	**Q W**	100	5	On pile.	Maintained by U.S. Air Force. HORN: 1 blast ev 20s (2s bl).
	*						1/04
25	- Light V	29 24 54 N 84 20 42 W	**Q W**	100	5	On pile.	Maintained by U.S. Air Force. HORN: 1 blast ev 20s (2s bl).
	*						1/04
30	- Light K	29 39 54 N 84 22 12 W	**Q W**	100	5	On pile.	Maintained by U.S. Air Force. HORN: 1 blast ev 20s (2s bl).
	*						1/04
35	- Light S	29 17 54 N 84 36 42 W	**Q W**	100	5	On pile.	Maintained by U.S. Air Force. HORN: 1 blast ev 20s (2s bl).
	*						1/04
40	- Light O	29 32 18 N 84 37 00 W	**Q W**	100	5	On pile.	Maintained by U.S. Air Force. HORN: 1 blast ev 20s (2s bl).
	*						1/04

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CORRECTIONS TO C. G. LIGHT LIST, VOLUME IV LIGHT LIST, 2003

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
45	- Light C	29 24 42 N 84 51 24 W	**Q W**	100	5	On pile.	Maintained by U.S. Air Force. HORN: 1 blast ev 20s (2s bl).
	*						1/04
	PENSACOLA BAY AND APPROACHES (Chart 11382)						
203	**Texaco-VK-786A-A RACON**	29 13 42 N 87 46 48 W		146		On Texaco Platform.	BAND: S,X. SIGN: Texaco-VK-786A-A. RACON: C(– • – •). Private aid.
	*						1/04
337 8392	**Ship Island Lighthouse**		**Fl W** 10s	76		Tapered white square with black cupola.	
	*						* 1/04
	MISSISSIPPI SOUND AND APPROACHES (Chart 11373)						
350 10490	**Chandeleur Light**	30 02 48 N 88 52 42 W	**Fl W** 6s	65	9	NB on a skeleton tower.	
	*						1/04
440 12560	**South Pass West Jetty Range Front Light**	28 59 24 N 89 08 24 W	**F G**	40		KRW on skeleton tower on piles.	Visible all around. Higher intensity on rangeline. HORN: 2 blasts ev 20s (2s bl-2s si-2s bl-14s si). Continuously from Nov. 1 to Apr. 30.
	*						* 1/04
455 12690	**Southwest Pass Entrance Light**	28 54 20 N 89 25 43 W	**Fl W** 10s	85	21	Tower on white dwelling on piles.	RACON: K(– • –). Emergency light of reduced intensity: Fl W 10s. HORN: 2 blasts ev 20s (2s bl-2s si-2s bl-14s si).
							* 1/04
510	Vastar 170-20 Buoy Marks Subsea Installation	29 01 48 N 89 53 06 W				White with orange bands.	SIGN: VASTAR-GI-32-3. Private aid.
	*						1/04
	LOOP DEEPWATER PORT (Chart 11359)						
530	**LOOP Pumping Platform Light 100-5**	28 53 06 N 90 01 30 W	**Fl W** 10s	213	15	On platform.	RACON: O (– – –). Platform additionally lighted by (9) Q W lights. Private aid. HORN (2): 1 blast (2s bl) in unison ev 20s.
	*						1/04
978	*Gryphon-104-1 Lighted Buoy* Marks subsea installation.	28 29 05 N 93 16 19 W	**Q R**	10		Red.	SIGN: Gryphon-WC-489-1. Private aid. Private light.
	*						* 1/04
1075	**Old Sabine Bank Light**	29 28 18 N 93 43 24 W	**Q W**	30	5	Red conical tower on cylindrical caisson.	Shows 2 quick flashing obstruction lights.
	*						1/04

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CORRECTIONS TO C. G. LIGHT LIST, VOLUME IV LIGHT LIST, 2003

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
1295 25780	COLORADO RIVER WEST JETTY ENTRANCE LIGHT 1	28 35 28 N 95 59 04 W	**Fl G** 2.5s	17	4	SG on pile with platform.		
						*		1/04
1455	- LIGHT 7	30 03 45 N 84 11 23 W	**Fl G** 4s	17	4	SG on pile.	Ra ref.	
					*			1/04
3790	- ENTRANCE LIGHT 8	30 23 24 N 86 30 45 W	**Fl R** 2.5s	17	4	TR on pile.	Ra ref.	
		*			*			1/04
4075 31570	- NAVY RANGE FRONT LIGHT	30 20 04 N 87 18 59 W	**Fl G** 2.5s **Fl G** 2.5s	34 36		KRW on skeleton tower on piles.	Visible all around, higher intensity on rangeline.	
							*	1/04
	SANTA ROSA SOUND TO DAUPHIN ISLAND (Chart 11378)							
	Escambia Bay							
4690	- LIGHT 2	30 28 00 N 87 07 19 W	**Fl R** 6s	17	5	TR on pile.		
					*			1/04
6470	- CHANNEL LIGHT 3	30 33 18 N 88 02 28 W	**Fl G** 4s	17	4	SG on pile.	Ra ref.	
					*			1/04
6535	- CHANNEL LIGHT 15	30 33 54 N 88 05 04 W	**Fl G** 4s	21	4	SG on pile.	Ra ref.	
					*			1/04
6643	ISLE AUX HERBES WRECK LIGHT	30 18 18 N 88 16 27 W	**Fl W** 2.5s	17	5	NW on pile worded DANGER WRECK.	Ra ref.	
					*			1/04
6802	PETIT BOIS PASS LIGHT P	30 13 53 N 88 19 53 W	**Fl W** 2.5s	20	5	NR on piles.	Ra ref.	
					*			1/04
7042	- WRECK LIGHT WR	30 16 51 N 88 31 08 W	**Fl W** 2.5s	17	5	NW on pile worded DANGER WRECK.	Ra ref.	
					*			1/04
	DAUPHIN ISLAND TO DOG KEYS PASS (Chart 11374)							
7210	*Pascagoula River Obstruction Lighted Buoy 2* Marks outer end of submerged ways.		**Fl R** 2.5s			Red.	Private aid.	
			*					1/04

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CORRECTIONS TO C. G. LIGHT LIST, VOLUME IV LIGHT LIST, 2003

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
7280	- LIGHT 11	30 24 20 N 88 35 04 W	**Fl G** 4s	17	4	SG on pile.	Ra ref.
					*		1/04
7315	- CUTOFF LIGHT 3	30 25 33 N 88 32 28 W	**Fl G** 4s	17	4	SG on pile.	Ra ref.
					*		1/04
7365	- CHANNEL RANGE D FRONT LIGHT	30 16 26 N 88 30 47 W	**Q W** **Q W**	25 27	 4	KRW on skeleton tower on piles.	Visible all around; higher intensity on rangeline.
				*			1/04
7433	- LIGHT 11B	30 20 05 N 88 30 52 W	**Fl G** 6s	17	4	SG on pile.	Ra ref.
					*		1/04
7605	**Oyster Bayou Light**	29 12 52 N 91 07 43 W	**Fl W** 6s	30	7	NB on skeleton tower on piles.	Ra ref.
	*	*	*	*	*	*	1/04
8839	LONG BEACH WRECK LIGHT WR1	30 20 20 N 89 08 31 W	**Q G**	17	3	SG on pile.	Ra ref.
					*		1/04
9079	SQUARE HANDKERCHIEF SHOAL LIGHT "SH"	30 15 49 N 89 19 37 W	**Fl (2+1) G** 6s	17	3	JG on pile.	
	*						1/04
9079.05	SQUARE HANDKERCHIEF SHOAL LIGHT 2	30 16 02 N 89 18 56 W	**Fl R** 2s	17	4	TR on pile.	
			*				1/04
12560 440	**-South Pass West Jetty Range Front Light**	28 59 24 N 89 08 24 W	**F G**	40		KRW on skeleton tower on piles.	Visible all around. Higher intensity on rangeline. HORN: 2 blasts ev 20s (2s bl-2s si-2s bl-14s si). Continuously from Nov. 1 to Apr. 30.
	*						1/04
12665	- ENTRANCE WEST RANGE FRONT LIGHT	28 54 36 N 89 25 54 W	**Q G**	21		NG on dolphin.	Visible 4° each side of rangeline.
						*	1/04
12725	- LIGHT 5		**Iso G** 6s	43	5	SG on skeleton tower on piles.	
					*		1/04
14570	RESCUE LIGHT 190 LDB mile 188.6.		**Iso R** 6s		4	TR on pile.	
					*		1/04
14720	PLAQUEMINE BEND LIGHT 213 RDB mile 210.4.	30 19 04 N 91 13 06 W	**Iso G** 6s		5	SG on pile.	
		*			*		1/04

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CORRECTIONS TO C. G. LIGHT LIST, VOLUME IV LIGHT LIST, 2003

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
15333	- Buoy 5						*Remove from list.*	
							*	1/04
15335	- Buoy 6						*Remove from list.*	
							*	1/04
15338	- Buoy 5					Green can.		
	*							1/04
15343	- Buoy 7	29 15 22 N 89 55 54 W				Green can.		
	*							1/04
15345	- Buoy 8					Red nun.		
	*							1/04
*15347	- Buoy 9					Green can.		
								1/04
*15348	- Buoy 10					Red nun.		
								1/04
	Terrobonne Bay Texaco Pipeline							
16682	- LIGHT A	29 04 36 N 90 28 12 W	**Fl Y** 2.5s	7		NW on pile worded DO NOT ANCHOR OR DREDGE.	Private aid.	
								1/04
	TIMBALIER AND TERREBONNE BAYS (Chart 11357)							
17385	CAILLOU BOCA ENTRANCE LIGHT 2	29 04 04 N 90 47 40 W	**Fl R** 2.5s	17	4	TR on pile.		
						*		1/04
17705 760	**OYSTER BAYOU LIGHT**	29 12 52 N 91 07 43 W	**Fl W** 6s	30	7	NB on skeleton tower on piles.	Ra ref.	
	*							1/04
19825	- LIGHT 4		**Fl R** 4s	17	4	TR on pile.		
						*		1/04
19970	- Light 7	29 30 45 N 92 18 49 W	**Fl G** 4s	17	4	SG on dolphin.	Ra ref.	
		*						1/04
20928 33743	- RANGE FRONT LIGHT	30 06 28 N 93 18 19 W	**Q G**	20	4	KRW-I on skeleton tower on piles.	Visible all around. Higher intensity on rangeline. KRW-I for inbound traffic. SG for outboard traffic.	
*	*	*				*	*	1/04

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CORRECTIONS TO C. G. LIGHT LIST, VOLUME IV LIGHT LIST, 2003

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
20929 33744	- RANGE REAR LIGHT 192 yards, 046.4° from front light.	30 06 32 N 93 18 14 W	**F G**	37		KRW-I on skeleton tower on piles.	Visible all around. Higher intrnsity on rangeline.
*	*	*				*	* 1/04
	Sabine Pass						
21450 1080	**- Sabine Pass East Jetty Light**	29 38 41 N 93 49 22 W	**Fl W** 5s	42	13	Cylindrical tower on piles.	HORN: 2 blasts ev 20s (2s bl-2s si-2s bl-14s si). Continuously from Nov. 1 to Apr. 30.
	*						1/04
21865 34045	- RANGE H FRONT LIGHT	29 52 06 N 93 55 49 W	**Q R**	39		KRW-I on skeleton tower on block.	For upbound traffic Visible 2° each side of rangeline.
						*	1/04
22430	- RANGE T REAR LIGHT 310 yards, 107.9° from front light.		**F G**	71		On skeleton tower on block.	Lighted throughout 24 hours.
	*						1/04
22545	MOBIL NO. 2 WHARF LIGHTS (2)	29 41 11 N 94 58 54 W	**Fl G** 2.5s	30		On end of dock.	Private aids.
		*					1/04
22980	- LIGHT 43 235 feet outside channel limit.	29 27 26 N 94 50 56 W	**Fl G** 4s	17	4	SG on pile.	Ra ref.
							1/04
24050	EXXON DOCK 5 LIGHT	29 43 39 N 95 01 23 W	**Fl R** 2.5s	22		On pilings.	Private aid.
			*				1/04
25630	- LIGHT 8		**Q R**	22	5	TR on skeleton tower on block.	
						*	1/04
25655	FREEPORT JETTY INBOUND RANGE REAR LIGHT 2,317 yards, 317.5° from front light.		**Oc W** 4s (Day) **Oc G** 4s (Night)	143 146		KRW on skeleton tower on block.	Visible 2° each side of rangeline. Lighted throughout 24 hours.
				*		*	1/04
25690	FREEPORT HARBOR OUTBOUND RANGE FRONT LIGHT	28 56 36 N 95 18 10 W	**Q R**	25		KRW on skeleton tower.	Visible 2° each side of rangeline.
				*			1/04
	***Delete Headings:** ***CEDAR LAKES TO ESPIRITU SANTO BAY (Chart 11319)** ***East Matagorda Bay**						
25775	Geological Survey Tide Gage Daybeacon						*Remove from list.*
							* 1/04

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CORRECTIONS TO C. G. LIGHT LIST, VOLUME IV LIGHT LIST, 2003

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
25965	- RANGE A FRONT LIGHT	28 26 34 N 96 20 42 W	**Fl W** 2.5s (Day) **Fl W** 2.5s (Night) **Fl W** 2.5s	24 22 26		On pile with platform.	Visible all around; higher intensity on range line.	
								1/04
28350 40740	- RANGE C FRONT LIGHT	26 02 12 N 97 12 42 W	**Q G** **Q G**	25 27	3	KRW-I on skeleton tower on piles.	Visible all around; higher intensity on range line.	
				*	*			1/04
28360 40750	- RANGE A FRONT LIGHT	26 01 51 N 97 13 32 W	**Q W** **Q W**	33	6	KRW-I on skeleton tower.	Visible all around; higher intensity on range line.	
					*			1/04
28380 40770	- RANGE E FRONT LIGHT	26 01 27 N 97 14 37 W	**Q W** **Q W**	33 35	5	KRW-I on skeleton tower on piles.	For downbound traffic. Visible all around; higher intensity 2° each side of rangeline.	
				*	*		*	1/04
28395 40785	- RANGE B FRONT LIGHT	26 00 52 N 97 15 46 W	**Q W** **Q W**	33 35	5	KRW-I on skeleton tower on piles.	For downbound traffic. Visible all around; higher intensity 2° each side of rangeline.	
		*	*	*	*		*	1/04
28420 40825	- RANGE D FRONT LIGHT	25 58 28 N 97 19 57 W	**Q W** **Q W**	25 27	5	KRW-I on skeleton tower.	Visible all around; higher intensity on rangeline.	
		*		*	*		*	1/04
28435 40815	- RANGE G FRONT LIGHT	29 41 29 N 84 58 27 W	**Q G** **Q G**	25 27	3	KRW-I on skeleton tower on piles.	Visible all around; higher intensity on rangeline.	
		*		*	*		*	1/04
29095	- RANGE FRONT LIGHT	29 43 23 N 84 58 46 W	**Q G** **Q G**	15 17	3	KRW-I on dolphin.	Visible all around; higher intensity on rangeline.	
				*	*			1/04
29100	- RANGE REAR LIGHT 1,392 yards, 350.3° from front light.		**F G**	45		KRW-I on skeleton tower on piles.	Visible 2° each side of rangeline.	
	*							1/04
31570 4075	- NAVY RANGE FRONT LIGHT	30 20 04 N 87 18 59 W	**Fl G** 2.5s **Fl G** 2.5s	34 36	3	KRW on skeleton tower on piles.	Visible all around; higher intensity on rangeline.	
					*			1/04
	New Orleans - Port Arthur							
33743	- RANGE FRONT LIGHT	30 06 28 N 93 18 19 W	**Q G**	20	4	KRW-I on skeleton tower on piles.	Visible all around; higher intensity on rangeline. KRW-I for inbound traffic. SG for outbound traffic.	
	*	*				*		1/04

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CORRECTIONS TO C. G. LIGHT LIST, VOLUME IV LIGHT LIST, 2003

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
33744	- RANGE REAR LIGHT 192 yards, 046.4° from front light.	30 06 32 N 93 18 14 W	**F G**	37		KRW-I on skeleton tower on piles.	Visible all around; higher intensity on rangeline.	
	*	*				*	*	1/04
33746	- LIGHT 3 88 yards outside channel limit.						*Remove from list.*	
							*	1/04
34045 21865	- RANGE H FRONT LIGHT	29 52 06 N 93 55 49 W	**Q R**	39		KRW-I on skeleton tower on block.	For upbound traffic. Visible 2° each side of rangeline.	
						*		1/04
34120	- LIGHT 8		**Fl R** 4s	17	3	TR-TY on pile.		
				*				1/04
38560	- LIGHT 137	27 36 39 N 97 20 22 W	**Fl G** 4s	17	4	SG-SY on pile.	Ra ref.	
		*						1/04
40740 28350	- RANGE C FRONT LIGHT	26 02 17 N 97 12 43 W	**Q G** **Q G**	25 27	3	KRW-I on skeleton tower on piles.	Visible all around; higher intensity on range line.	
				*	*			1/04
40750 28360	- RANGE A FRONT LIGHT	26 01 51 N 97 13 32 W	**Q W** **Q W**	33 35	6	KRW-I on skeleton tower.	Visible all around; higher intensity on range line.	
				*	*			1/04
40770 28380	- RANGE E FRONT LIGHT	26 01 27 N 97 14 37 W	**Q W** **Q W**	33 35	5	KRW-I on skeleton tower on piles.	For downbound traffic. Visible all around; higher intensity 2° each side of rangeline.	
				*	*		*	1/04
40785 28395	- RANGE B FRONT LIGHT	26 00 52 N 97 15 46 W	**Q R** **Q R**	25 27	3	KRW-I on skeleton tower on piles.	Visible all around; higher intensity on rangeline.	
				*	*			1/04
40815 28435	- RANGE G FRONT LIGHT	25 58 44 N 97 19 22 W	**Q G** **Q G**	25 27	3	KRW-I on skeleton tower on piles.	Visible all around; higher intensity on rangeline.	
				*	*		*	1/04
40825 28420	- RANGE D FRONT LIGHT	25 58 28 N 97 19 57 W	**Q W** **Q W**	25 27	5	KRW-I on skeleton tower.	Visible all around; higher intensity on rangeline.	
				*	*			1/04

CORRECTIONS TO C. G. LIGHT LIST, VOLUME VI LIGHT LIST, 2003

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
4306	AQUATIC PARK ENTRANCE LIGHT 1	37 48 38 N 122 25 25 W	**Fl G** 4s	21	3	SG on post.	Ra ref.	
		*						1/04

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CORRECTIONS TO C. G. LIGHT LIST, VOLUME VI LIGHT LIST, 2003

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
4307	FISHERMANS WHARF BREAKWATER LIGHT A	37 48 41 N 122 25 21 W	**Fl Y** 2.5s	21	5	NR on post.	Ra ref.	
		*						1/04
4308	FISHERMANS WHARF BREAKWATER LIGHT B	37 48 42 N 122 25 16 W	**Fl Y** 2.5s	21	5	NR on post.	Ra ref.	
		*						1/04
	Richardson Bay							
4380	CONE ROCK LIGHT	37 51 51 N 122 28 11 W	**Q W**	17	5	NR on black skeleton tower.		
		*						1/04
	Sausalito Channel							
4385	- LIGHT 2	37 51 21 N 122 28 07 W	**Fl R** 4s	14	4	TR on pile.		
		*						1/04
4390	- LIGHT 4	37 51 41 N 122 28 44 W	**Fl R** 6s	15	3	TR on pile.	Ra ref.	
		*						1/04
4600	YERBA BUENA ISLAND WHARF LIGHT	37 48 29 N 122 21 40 W	**F R**	18	6	On post.		
		*						1/04
4650	- *Lighted Buoy 7*	37 48 51 N 122 19 40 W	**Fl G** 2.5s		3	Green.		
	*	*	*		*	*		1/04
4684	- TURNING BASIN LIGHT B	37 47 28 N 122 17 20 W	**Iso W** 6s	18	4	NR on pile.		
		*						1/04
4755	- LIGHT 3	37 46 37 N 122 19 52 W	**Fl G** 2.5s	15	3	SG on pile.	Ra ref.	
		*						1/04
4760	- LIGHT 4	37 46 24 N 122 19 49 W	**Fl R** 4s	12	3	TR on pile.	Ra ref.	
		*			*			1/04
4835	- LIGHT 2	37 40 15 N 122 13 20 W	**Fl R** 4s	15	3	TR on pile.		
		*			*			1/04
4885	- LIGHT 14	37 41 39 N 122 11 32 W	**Fl R** 2.5s	15	3	TR on pile.		
		*		*	*			1/04

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CORRECTIONS TO C. G. LIGHT LIST, VOLUME VI LIGHT LIST, 2003

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
4895	- LIGHT 6	37 40 44 N 122 12 44 W	**Fl R** 2.5s	15	3	TR on pile.	Ra ref.
		*					1/04
5745	- Daybeacon 16					TR on pile.	
						*	1/04
7255	- LIGHT 19	38 06 47 N 121 42 37 W	**Fl G** 4s	15	4	SG on pile.	Ra ref.
		*					1/04
7270	- LIGHT 22	38 06 58 N 121 42 15 W	**Fl R** 2.5s	15	2	TR on pile.	Ra ref.
		*					1/04
7275	- LIGHT 23	38 07 28 N 121 41 57 W	**Fl G** 6s	15	3	SG on pile.	Ra ref.
		*					1/04
7280	- LIGHT 24	38 07 27 N 121 41 50 W	**Fl R** 2.5s	15	3	TR on pile.	Ra ref.
		*					1/04
7285	- LIGHT 25	38 08 00 N 121 41 43 W	**Fl G** 4s	15	3	SG on pile.	Ra ref.
		*					1/04
7490	- LIGHT 63	38 22 25 N 121 37 51 W	**Fl G** 4s	19	4	SG on pile.	
		*					1/04
7495	- LIGHT 64	38 22 23 N 121 37 45 W	**Fl R** 4s	19	4	TR on pile.	
		*					1/04
16160	NEAH BAY LIGHT 2	48 22 41 N 124 35 40 W	**Fl R** 6s	46	7	TR on skeleton tower.	Light obscured from 114° to 196°. HORN: 1 blast ev 30s (3s bl).
		*					1/04
	Ediz Hook						
16280	**- Light**	48 08 25 N 123 24 08 W	**Fl G (2) W** 10s 0.1s G fl 2.4s ec. 0.1s W fl 2.4s ec. 0.1s W fl 4.9s ec.	60	W 18 G 16	On skeleton tower.	Lighted throughout 24 hours. HORN: 1 blast ev 30s (3s bl).
		*	*				1/04
	Coast Guard Mooring						
16291	- BREAKWATER OBSTRUCTION LIGHT	48 08 23 N 123 24 43 W	**Fl Y** 4s	12	4	NY on concrete wall.	
		*					1/04

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CORRECTIONS TO C. G. LIGHT LIST, VOLUME VI LIGHT LIST, 2003

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
16294	- BASIN LIGHT 3	48 08 23 N 123 24 55 W	**Fl G** 2.5s	14	3	SG on multi-pile.	
		*					1/04
16375	**Smith Island Light**	48 19 06 N 122 50 38 W	**Fl W** 15s	97	21	45	
		*					1/04
16380	MINOR ISLAND LIGHT	48 19 27 N 122 49 09 W	**Fl W** 4s	36	6	Cylindrical tower.	
		*					1/04
16400	**Point Partridge Light**	48 13 29 N 122 46 10 W	**Fl W** 5s	105	18	NB on skeleton tower.	Lighted throughout 24 hours. HORN: 1 blast ev 30s (3s bl).
		*					1/04
	ADMIRALTY INLET AND PUGET SOUND TO SEATTLE (Chart 18441)						
	Admiralty Inlet						
16475	**Point Wilson Light**	48 08 39 N 122 45 17 W	**Oc W & Fl R** 20s 15s W fl 2.4s ec. 0.2s R fl 2.4s ec.	51	W 16 R 15	White octagonal tower on fog signal building.	Emergency light Iso W 6s. Lighted throughout 24 hours. HORN: 1 blast ev 30s (3s bl).
		*					1/04
16505	**Bush Point Light**	48 01 51 N 122 36 25 W	**Fl W** 2.5s	25	11	White pyramidal building. 20	
		*					1/04
16520	DOUBLE BLUFF LIGHT	47 58 03 N 122 32 47 W	**Fl W** 4s	60	8	NG on skeleton tower.	
		*					1/04
16750 17915	POINT MONROE LIGHT	47 42 31 N 122 30 41 W	**Iso W** 6s	30	6	NG on skeleton tower.	Obscured from 321° to 089°.
		*					1/04
16825	TYEE SHOAL LIGHT	47 36 35 N 122 29 15 W	**Fl (2+1) R** 6s	15	5	JR on dolphin.	Higher intensity on bearing 094°. HORN: 1 blast ev 15s (2s bl). Ra ref.
		*					1/04
16830	BLAKELY ROCK LIGHT	47 35 40 N 122 28 50 W	**Fl W** 4s	16	5	NB on skeleton tower.	
		*					1/04
16856	COAST GUARD PIER LIGHT NORTH	47 35 24 N 122 20 34 W	**F R**	15	6	On pier.	
		*					1/04

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CORRECTIONS TO C. G. LIGHT LIST, VOLUME VI LIGHT LIST, 2003

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
	***Delete Headings:** ***PUGET SOUND - Seattle to Bremerton (Chart 18449)** ***Elliott Bay**						
16857	COAST GUARD PIER LIGHT SOUTH	47 35 23 N 122 20 35 W	**F R**	15	6	On pier.	
		*					1/04
	East Passage						
16915	**Alki Point Light**	47 34 35 N 122 25 14 W	**Fl W** 5s	39	15	White octagonal tower attached to building. 37	Emergency light: Iso W 6s. Lighted throughout 24 hours. HORN: 2 blasts ev 30s (2s bl-2s si-2s bl-24s si).
		*					1/04
16955	- EAST LIGHT	47 32 27 N 122 28 51 W	**Fl W** 4s	18	6	NB on skeleton tower.	
		*					1/04
16980	**Three Tree Point Light**	47 27 02 N 122 22 57 W	**Fl W** 2s	25	11	White skeleton tower. 20	HORN: 1 blast ev 15s (2s bl).
		*					1/04
	East Passage						
17070	**Robinson Point Light**	47 23 17 N 122 22 28 W	**Fl (2) W** 12s 3s fl 1s ec. 3s fl 5s ec.	40	13	White octagonal tower. 38	Emergency light Iso W 6s. HORN: 1 blast ev 30s (3s bl).
		*					1/04
17090	**Browns Point Light**	47 18 22 N 122 26 35 W	**Fl W** 5s	38	12	White tower. 31	Light obscured from 217° to 002°. HORN: 2 blasts ev 30s (2s bl-2s si-2s bl-24s si).
		*					1/04
	Blair Waterway						
17166	**- Light 1**	47 16 21 N 122 24 10 W	**Iso G** 6s	53	10	Skeleton tower.	Lighted throughout 24 hours.
		*					1/04
17775	Case Shoal Daybeacon	47 51 35 N 122 40 29 W				NW on pile worded DANGER SHOAL.	
		*					1/04
17785	- LIGHT 7	47 49 32 N 122 38 58 W	**Fl G** 2.5s	15	4	SG on pile.	Ra ref.
		*					1/04
17840	HAZEL POINT LIGHT	47 41 35 N 122 46 15 W	**Fl W** 4s	15	5	NB on pile.	Ra ref.
		*					1/04
17845	- LIGHT 11	47 41 25 N 122 44 50 W	**Fl G** 4s	15	6	SG on dolphin.	Ra ref.
		*					1/04

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CORRECTIONS TO C. G. LIGHT LIST, VOLUME VI LIGHT LIST, 2003

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
17850	OAK HEAD LIGHT 12	47 40 54 N 122 48 41 W	**Fl R** 4s	15	5	TR on pile.	Ra ref.
		*					1/04
17865	TSKUTSKO POINT LIGHT	47 41 35 N 122 49 59 W	**Fl W** 4s	15	5	NB on pile.	Ra ref.
		*					1/04
17880	Seal Rock Daybeacon	47 42 53 N 122 53 05 W				NW on pipe worded DANGER ROCKS.	
		*					1/04
17895	QUILCENE BAY LIGHT 2	47 46 45 N 122 51 11 W	**Fl R** 4s	26	4	TR on pile.	Obscured from 170° to 260°. Ra ref.
		*					1/04
17900	TABOOK POINT LIGHT 18	47 46 45 N 122 48 35 W	**Fl R** 6s	15	5	TR on pile.	Ra ref.
		*					1/04
	Port Madison and Port Orchard						
17915 16750	POINT MONROE LIGHT	47 42 31 N 122 30 41 W	**Iso W** 6s	30	6	NG on skeleton tower.	Obscured from 321° to 089°.
		*					1/04
17925	Treasure Island Shoal Daybeacon 2	47 41 51 N 122 32 08 W				TR on pile.	
		*					1/04
	Eagle Harbor						
18000	CREOSOTE LIGHT 1	47 36 59 N 122 29 48 W	**Fl G** 6s	30	4	SG on dolphin.	
		*					1/04
18035	ORCHARD POINT LIGHT	47 33 55 N 122 31 56 W	**Oc W** 4s	34	9	White pyramidal concrete tower.	HORN: 2 blasts ev 20s (2s bl-2s si-2s bl-14s si).
		*					1/04
18055	Orchard Rocks Daybeacon	47 34 39 N 122 31 55 W				JR on pile.	
		*					1/04
18115	- ENTRANCE RANGE FRONT LIGHT	47 40 00 N 122 24 11 W	**Q R**	20		KRW on dolphin.	Visible 4° each side of rangeline.
		*					1/04
18460	**Mukilteo Light**	47 56 55 N 122 18 22 W	**Fl W** 5s	33	14	White octagonal tower attached to building. 30	Emergency light: Iso W 6s. HORN: 1 blast ev 30s (3s bl).
		*					1/04

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CORRECTIONS TO C. G. LIGHT LIST, VOLUME VI LIGHT LIST, 2003

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
18625	- LIGHT 4	48 07 58 N 122 30 40 W	**Fl R** 4s	15	5	TR on tower.	
		*					1/04
	Deception Pass						
18890	BEN URE ISLAND LIGHT 2	48 24 16 N 122 37 43 W	**Fl R** 4s	25	4	TR on tower.	
		*					1/04
18960	SHANNON POINT LIGHT	48 30 35 N 122 41 02 W	**Fl W** 4s	15	6	NB on dolphin.	HORN: 1 blast ev 30s (3s bl). Operates continuously. Ra ref.
		*					1/04
19265	BELLINGHAM BREAKWATER ENTRANCE LIGHT 2	48 45 12 N 122 30 26 W	**Oc R** 4s	24	6	TR on steel tower.	HORN: 1 blast ev 15s (2s bl).
		*					1/04
19790	TURN POINT LIGHT	48 41 20 N 123 14 15 W	**Fl W** 2.5s	44	8 16	White concrete tower.	Light obscured from 260°30′ to 357°. HORN: 2 blasts ev 30s (2s bl-2s si-2s bl-24s si).
		*					1/04
19825	PATOS ISLAND LIGHT	48 47 20 N 122 58 17 W	**Fl W** 6s **(2 R sectors)**	52	W 9 R 6 38	White square tower on fog signal house.	Red from 011.5° to 059.5°, covers 6 fathom shoal. Red from 097° to 114°, covers Rosenfeld Rock. HORN: 1 blast ev 30s (3s bl).
		*					1/04
19935	INTERNATIONAL BOUNDARY RANGE C FRONT LIGHT	49 00 08 N 122 46 55 W	**Q G**	37		Rectangular shaped orange daymark on gray skeleton tower.	Visible 4° each side of rangeline.
		*					1/04
30135	- Channel Buoy 12	16 44 05 N 169 31 01 W				Red nun.	
		*					1/04

CORRECTIONS TO C. G. LIGHT LIST, VOLUME VII LIGHT LIST, 2003

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
	***Add Heading:** ***Lyman Harbor**						
*4945	- Light	41 27 19 N 82 41 02 W	**Fl W** 4s	43 **13**		Steel frame lighthouse red with yellow trim and worded LYMAN in black.	Private aid.
							1/04
*4946	- Light 1	41 27 18 N 82 41 00 W	**Fl G** 2s	10 **3**		SG on end of break wall.	Private aid.
							1/04

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CORRECTIONS TO C. G. LIGHT LIST, VOLUME VII LIGHT LIST, 2003

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
*4947	- Light 2	41 27 19 N 82 41 02 W	**Fl R** 2s	6 **2**		TR on end of break wall.	Private aid.	
								1/04
	***Add Heading:** ***Harbor Development Channel**							
4950	BATTERY PARK MARINA SOUTH ENTRANCE LIGHT	41 27 48 N 82 42 06 W	**F G**	20		On post.	Maintained from May 1 to Oct. 31. Private aid.	
								1/04
5015	WEST SHORE WATER SKI RAMP LIGHT						*Remove from list.*	
							*	1/04
*12608	St. Ignacc Marina South East Light	45 51 57 N 84 42 55 W	**Fl Y** 2.5s	20 **6**	3	NY on white pole	Private aid.	
								1/04
*12609	St. Ignacc Marina Entrance Light 1	45 51 57 N 84 43 03 W	**Fl G** 2.5s	25 **8**	3	SG on while pole.	Private aid.	
								1/04
*12609.5	St. Ignacc Marina Entrance Light 2	45 51 58 N 84 43 00 W	**Fl R** 2.5s	25 **8**	4	TR on white pole.	Private aid.	
								1/04
12610	St. Ignacc Marina North Break Wall Light	45 52 04 N 84 43 04 W	**Fl Y** 2.5s	25 **8**	3	NY on white pole.	Private aid.	
	*	*	*	*		*	*	1/04
18290	DUNCAN L. CLINCH YACHT HARBOR LIGHT 1	44 46 06 N 85 37 18 W	**Fl G** 2.5s	22 **7**	3	SG on pile.	Maintained from May 1 to Nov. 1. Private aid.	
	*	*	*	*		*		1/04
19051	*Lighted Buoy 15A*	43 04 19 N 86 12 33 W	**Fl G** 6s		3	Green.	Maintained from April 1 to Nov. 1.	
	*							1/04
19320	*Big Bay Lighted Buoy 1*		**Fl G** 6s		3	Green.	Maintained from Apr. 14 to Nov. 14.	
					*			1/04
19325	*Big Bay Lighted Buoy 2*		**Fl R** 6s		3	Red.	Maintained from Apr. 14 to Nov. 14.	
					*			1/04
20120	WILSON AVENUE BOAT RAMP SOUTH LIGHT						*Remove from list.*	
							*	1/04
20125	WILSON AVENUE BOAT RAMP NORTH LIGHT						*Remove from list.*	
							*	1/04

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CORRECTIONS TO C. G. LIGHT LIST, VOLUME VII LIGHT LIST, 2003

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
*21791	Cedar River Buoy 2A	45 24 20 N 87 20 59 W				Red.	Maintained from May 15 to Nov. 15. 1/04
*21792	Cedar River Buoy 2B	45 24 24 N 87 21 01 W				Red.	Maintianed from May 15 to Nov. 15. 1/04
*21798	Yacht Works Marina Breakwall Light "1"	45 12 08 N 87 07 15 W	**Fl G** 2.5s	27 **8**		SG on pile.	Private aid. 1/04
*21799	Yacht Works Marina Breakwall Light "2"	45 12 08 N 87 07 14 W	**Fl R** 2.5s	31 **9**		TR on pile.	Private aid. 1/04

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SECTION II

CORRECTIONS TO PUB 110, LIST OF LIGHTS, 2003 EDITION

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
2244 *H 0320*	-Grand Bank breakwater, seaward end.	47° 06.2′ N 55° 44.9′ W	**Q.R.**	19 **6**	4	Round mast; 16.		
			*		*	*		1/04
2248 *H 0322*	-Grand Bank, E. pier, head.	47° 06.1′ N 55° 45.0′ W	**Q.G.**	27 **8**	7	Red and white tower; 23.		
			*		*			1/04
*2395	-Rencontre Island.	47° 35.0′ N 57° 36.9′ W	**Fl.W.** period 4s	188 **57**	7	Square skeleton tower, red daymark, white horizontal band; 15.		
								1/04

CORRECTIONS TO PUB 111, LIST OF LIGHTS, 2003 EDITION

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
	***Add Heading:** ***ANTOFAGASTA:**							
*1117.1	-Shell Anchorage port Range, front.	23° 36.7′ S 70° 23.5′ W	**Q.G.**	43 **13**	4	White metal post, white triangular daymark, red stripe; 32.	Visible 043°-150°.	
								1/04
*1117.12	-Shell Anchorage starboard Range, front.	23° 36.7′ S 70° 23.5′ W	**Q.G.**	43 **13**	4	White metal post, white triangular daymark, red stripe; 32.	Visible 043°-150°.	
								1/04
*1117.13	- -Common rear.	23° 36.7′ S 70° 23.4′ W	**F.G.**	52 **16**	4	White metal post, white triangular daymark, red stripe; 16.	Visible 043°-150°; 95 meters 079° from front port; 95 meters 070° from front starboard.	
								1/04
*1118	-Shell Terminal Range, front.	23° 37.2′ S 70° 23.5′ W	**F.R.**	59 **18**	6	White metal post, white triangular daymark, red stripe; 41.	Visible 040°-180°.	
								1/04
*1118.1	- -Rear, 240 meters 132° from front.	23° 37.3′ S 70° 23.4′ W	**F.R.**	98 **30**	6	White metal post, white triangular daymark, red stripe; 41.	Visible 040°-180°.	
								1/04
9654 *K 3266.5*	-North West Reef.	10° 29.0′ S 142° 14.8′ E	**Iso.W.** period 5s	23 **7**	11	White fiberglass hut on white column; 19.	**Radar reflector.**	
		*						1/04
13712 *G 5312.4*	-Berens Island.	48° 25.5′ N 123° 23.5′ W	**Q.G.**	20 **6**	4	White round tower, green band at top.	**Radar reflector.**	
					*			1/04

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CORRECTIONS TO PUB 111, LIST OF LIGHTS, 2003 EDITION

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
13716 *G 5320*	-Shoal Point, W. of shoal.	48° 25.4′ N 123° 23.3′ W	**Q.R.**	19 **6**	4	White round tower, red band at top, on 19-pile dolphin.		
	-AVIATION LIGHT.		**Q.W.**				Aero. Occasional.	
					*			1/04
13720 *G 5322*	-Pelly Island.	48° 25.5′ N 123° 23.0′ W	**Fl.G.** period 4s fl. 0.5s, ec. 3.5s	19 **6**	4	White round tower, green band at top; 21.	**Radar reflector.**	
	-AVIATION LIGHT.		**Q.W.**				Aero. Occasional.	
					*			1/04
13724 *G 5324*	-Laurel Point.	48° 25.5′ N 123° 22.5′ W	**Q.R.**	18 **6**	3	White round tower, red band at top.	**Radar reflector.**	
					*			1/04

CORRECTIONS TO PUB 112, LIST OF LIGHTS, 2003 EDITION

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
5976 *F 6163.5*	- -E. head.						*Remove from list.*	
							*	1/04
12416 *F 5285*	Tsuyazaki Hana.	33° 47.2′ N 130° 27.0′ E	**Fl.W.** period 4s	213 **65**	12	White round concrete tower; 29.	F.W. light illuminates reef southward.	
	*	*			*			1/04
17792 *F 4199*	-Chonmang san.	36° 00.3′ N 126° 40.3′ E	**Fl.G.** period 4s	49 **15**	8	PORT (B) G, beacon, topmark.		
		*			*			1/04
21206 *F 1737.5*	-Sajahat Kechil.						*Remove from list.*	
							*	1/04

CORRECTIONS TO PUB 113, LIST OF LIGHTS, 2003 EDITION

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
552	*Les Chats Whistle Buoy.*						*Remove from list.*	
							*	1/04
1300 *D 1230*	-La Flotte, mole, head.	46° 11.3′ N 1° 19.3′ W	**Fl.W.G.** period 4s fl. 1s, ec. 3s	33 **10**	W. 12 G. 9	White turret, green top; 33.	G. 130°-205°, W.-220°, G.-257°.	
		*					*	1/04

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CORRECTIONS TO PUB 113, LIST OF LIGHTS, 2003 EDITION

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
1380 *D 1250*	- -Tourelle Richelieu.	46° 08.9′ N 1° 10.3′ W	**Fl.R.** period 4s fl. 1s, ec. 3s	33 **10**	9	Red octagonal tower; 56.		
		*	*				*	1/04
1381 *D 1254*	-Port of Minimes, W. jetty, head.	46° 08.8′ N 1° 10.2′ W	**Fl.G.** period 6s fl. 1s, ec. 1s fl. 1s, ec. 3s	29 **9**	7	White tower, green top; 56.		
		*	*			*		1/04
4145 *D 2425.66*	-Darsena Pesquera.	36° 08.2′ N 5° 26.6′ W	**Fl.(2)G.** period 8s	23 **7**	2	White and green round tower; 13.		
		*	*		*	*		1/04
4212 *D 2437*	-Pantalan de San Felipe.	36° 09.5′ N 5° 21.7′ W	**Fl.R.** period 5s fl. 0.5s, ec. 4.5s	16 **5**	2	Red column; 7.	F.R. lights on radio mast 0.87M ESE.	
			*	*		*	*	1/04
*10526 *E 2057*	-Mellieha rock.	35° 58.3′ N 14° 21.5′ E	**Fl.(2)W.** period 5s	10 **3**	2			
								1/04

CORRECTIONS TO PUB 115, LIST OF LIGHTS, 2003 EDITION

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
5272 *L 0354*	Olaskjaer.	61° 43.5′ N 4° 57.0′ E	**Iso.W.R.G.** period 4s	33 **10**		Lantern on tripod.	R. 013°-017°, G.-091°30′, R.-099°30′, G.-104°, R.-150°, W.-163°30′, G.-219°30′, W.-229°, R.-326°30′, G.-338°, R.-350°30′, W.-356°30′, G.-013°.	
					*	*	*	1/04
5286 *L 0357*	Guleskjer.	61° 45.7′ N 5° 03.2′ E	**Fl.G.** period 3s	23 **7**				
				*				1/04
5290.1 *L 0359.1*	- -Myrhjellen, rear, about 210 meters 264°36′ from front.	61° 45.2′ N 5° 05.2′ E	**F.R.**	39 **12**			Visible 260°-270°.	
				*				1/04
5294.1 *L 0360.51*	- -Rear, about 90 meters 206° from front.	61° 45.1′ N 5° 08.4′ E	**F.R.**	66 **20**			Visible 202°-212°.	
				*				1/04
5295 *L 0359.2*	-Leirvikneset.	61° 45.4′ N 5° 07.9′ E	**F.R.**	23 **7**		Floodlit.		
				*				1/04
5296 *L 0364*	-Holmane, Storholmen, NW. side.	61° 45.9′ N 5° 09.9′ E	**Iso.W.R.G.** period 6s	33 **10**	W. 6 R. 5 G. 4		G. 048°-053°, W.-063°30′, R.-257°30′, W.-262°, G.-277°.	
					*	*	*	1/04

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CORRECTIONS TO PUB 115, LIST OF LIGHTS, 2003 EDITION

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5300 *L 0366*	-Sandsneset.	61° 46.0′ N 5° 17.0′ E	**F.R.**	7 **2**	3	Post.	
*				*	*	*	* 1/04
5324 *L 0384*	- -Sparkeltaren.	61° 46.0′ N 4° 54.0′ E	**Oc.(2)W.R.G.** period 8s	14 **4**	W. 9 R. 7 G. 6	Iron hut on substructure.	R. 178°-193°30′, G.-348°30′, W.-358°, R.-015°30′, G.-063°.
			*		*		* 1/04
5328 *L 0394*	- -Stangholmen.	61° 46.3′ N 4° 54.0′ E	**Iso.R.** period 2s	10 **3**	1	Iron pole.	
				*			1/04
5356 *L 0381*	-Stompeskjaeret, Froya, S.	61° 44.4′ N 4° 50.5′ E	**Fl.W.** period 3s	13 **4**	5	Iron perch.	
			*				1/04
5368 *L 0410*	-Iglandsvika.	61° 50.1′ N 4° 56.7′ E	**Oc.(2)W.R.G.** period 8s	13 **4**	W. 6 R. 4 G. 4	Lantern on piles.	R. 263°-266°, G.-269°, W.-270°, R.-002°, W.-005°, G.-068°, W.-077°, R.-100°, R. 161°-181°.
				*		*	* 1/04
5392 *L 0434.5*	-Hornelneset.	61° 51.8′ N 5° 15.6′ E	**Q.R.**	7 **2**	4	Metal column.	
			*	*		*	1/04
5396 *L 0439*	Berlepollen.	61° 50.0′ N 5° 07.0′ E	**Q.W.**	13 **4**	3	Dolphin.	Channel marked by F.R. on W. side.
				*			1/04
5412 *L 0432*	-Kalveholmen.	61° 52.4′ N 5° 13.6′ E	**Oc.W.R.G.** period 6s	20 **6**	W. 9 R. 6 G. 6	Small hut.	G. 295°-298°, W.-301°, R.-104°, W.-106°, G.-135°. Shown Jul. 9 - May 28.
				*			1/04
5420 *L 0426*	-Risoy.	61° 52.8′ N 5° 10.6′ E	**Oc.W.R.G.** period 6s	23 **7**	W. 9 R. 6 G. 6		G. 268°-285°, W.-286°, R.-305°, W.-160°30′, R.-168.
				*		*	* 1/04
5528 *L 0494*	-Ulven.	61° 57.7′ N 5° 08.9′ E	**Oc.W.R.G.** period 6s	20 **6**	W. 10 R. 7 G. 7	Lantern on piles.	R. 282°-007°, W.-013°, G.-022°, R.-176°, W.-189°, G.-249°. Shown Jul. 9 - May 28.
				*		*	1/04
	VANYLVSGAPET:						
5616 *L 0532*	-Terneskjerflu, Storesund, S. side.	62° 10.8′ N 5° 24.1′ E	**Oc.W.R.G.** period 6s	10 **3**	W. 7 R. 4 G. 4	Tripod.	R. 133°-161°, G.-211°, W.-346°, R.-058°, W.-071°, G.-092°.
				*			1/04

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CORRECTIONS TO PUB 115, LIST OF LIGHTS, 2003 EDITION

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks	
	-Orstafjord:							
5660 *L 0570*	- -Rjanes (Ajaaneset).	62° 14.9′ N 5° 57.8′ E	**Fl.G.** period 5s fl. 1s, ec. 4s	29 **9**	4	Lantern on wooden hut.		
					*			1/04
5776 *L 0660.1*	- - -Rear, 101 meters 112° from front.	62° 13.2′ N 5° 39.0′ E	**F.R.**	95 **29**	4	Wooden post.		
				*				1/04
5784 *L 0666.1*	- -Rear, 186 meters 114° from front.	62° 15.4′ N 5° 35.3′ E	**F.R.**	62 **19**	3	Post.		
				*				1/04
5864 *L 0624*	-Moyaskrevflu.	62° 18.0′ N 5° 46.0′ E	**Fl.G.** period 5s fl. 0.5s, ec. 4.5s	13 **4**	2	Iron post.		
				*				1/04
5904 *L 0614*	- -Gronevikholmen.	62° 14.8′ N 5° 53.0′ E	**Fl.R.** period 3s	12 **4**	3	Lantern.		
					*			1/04
5920 *L 0701*	Sneiingen Rock.	62° 20.2′ N 5° 49.4′ E	**Fl.R.** period 3s	7 **2**	2	Iron pole.		
				*	*			1/04
5960 *L 0737.8*	Remoy, mole.	62° 21.7′ N 5° 39.8′ E	**Iso.R.** period 2s	19 **6**	3	Metal post.		
					*	*		1/04
5972 *L 0746*	- -Channel, E. side.	62° 21.0′ N 5° 39.0′ E	**Fl.R.** period 3s	7 **2**	1	Metal column.		
				*		*	*	1/04
6016 *L 0716*	Rundoy Harbor, S. mole, head.	62° 23.8′ N 5° 39.8′ E	**Iso.R.** period 2s	10 **3**	1	Metal column.		
				*		*		1/04
6056 *L 0758*	-Havstein, island, N. side.	62° 29.3′ N 6° 03.9′ E	**Fl.(2)W.R.G.** period 10s fl. 1s, ec. 2s fl. 1s, ec. 6s	171 **52**	W. 7 R. 4 G. 3	Small hut.	G. 086°-099°, W.-103°, R.-113°, G.-196°, R.-215°, W.-239°, R.-251°, G.-262°, W.-295°, R.-000°, W.-023°, G.-030°.	
					*	*		1/04
12462 *L 3227*	-Borhella.	69° 06.3′ N 15° 34.6′ E	**Fl.W.R.G.** period 5s	66 **20**	W. 8 R. 6 G. 5		R. 030°30′-035°, W.-069°, G.-078°30′, W.-082°30′, R.-094°30′, W.-172°, G.-194°30′, R.-200°30′, W.-206°, G.-209°, R.-215°.	
					*			1/04

Note: *Asterisks* (*****) *indicate that column(s) in which a correction has been made or new information added.*
Denotes a new entry when preceding the station number.

CORRECTIONS TO PUB 115, LIST OF LIGHTS, 2003 EDITION

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
12472 *L 3231*	- -Nordmela, mole.	69° 08.6′ N 15° 41.0′ E	**Oc.W.R.G.** period 6s	16 **5**	W. 10 R. 7 G. 7	Metal column.	R. 072°-093°, W.-096° (not to be used west of W. sector of Sjaberget), G.-127°, obsc.-180°, G.-223°, obsc.-282°, G.-336°.
				*	*		1/04
12500 *L 3244*	Nattmalskjaer.	69° 17.0′ N 15° 56.0′ E	**Fl.W.R.G.** period 5s fl. 0.7s, ec. 4.3s	23 **7**	W. 7 R. 5 G. 5	White lantern on concrete column.	G. 284°30′-053°, R.-108°, W.-112°30′, G.-179°, R.-284°30′.
					*		1/04
12504 *L 3245*	Bleik, mole, head.	69° 17.0′ N 15° 57.0′ E	**Iso.R.** period 2s	23 **7**	4	Metal column.	
			*			*	1/04
12801 *L 3386*	- -Bridge.	69° 05.4′ N 17° 35.6′ E	**Oc.W.R.G.** period 6s	36 **11**	W. 5 R. 4 G. 3		R. 148°-186°, W.-221°, G.-334°, W.-021°, R.-037°.
		*			*		1/04
12804 *L 3398*	-Hyseskjeret, near Tranoy.	69° 08.3′ N 17° 23.8′ E	**Oc.(3)W.R.G.** period 12s	20 **6**		White lantern on piles.	R. 265°-277°, W.-083°, G.-198°30′, W.-204°30′, R.-211°.
					*	*	1/04
12812 *L 3402*	Klauvskjerodden.	69° 11.8′ N 18° 00.4′ E	**Fl.(2)W.R.G.** period 10s fl. 0.7s, ec. 1.5s fl. 0.7s, ec. 7.1s	20 **6**	W. 3 R. 2 G. 2	White lantern on concrete column.	G. 126°-132°, W.-145°, R.-150°, W.-155°, G.-181°, W.-221°, R.-235°, W.-299°, G.-330°, W.-335°, R.-339°.
		*			*	*	* 1/04
12820 *L 3404*	- -Common rear, Finnshasodden 60 meters 174° from Finnsnes front, 1,445 meters 180°30′ from Bjornhiskjer front.	69° 13.7′ N 17° 58.2′ E	**Oc.W.R.G.** period 6s	52 **16**	W. 6 R. 4 G. 4	Iron hut on iron framework, stone base.	G. 317°-318°30′, W.-336°, R.-035°, G.-065°, R.-093°, W.-098°, G.-127°30′, R.-172°, W.-183°, G.-185°. Seasonal.
	*	*					* 1/04
12832 *L 3404.7*	Gisund Bridge, NW.	69° 14.5′ N 17° 58.1′ E	**Oc.(2)W.R.G.** period 8s	20 **6**		White lantern, concrete post.	R. 000°-023°, W.-025°, G.-194°, W.-213°30′, R.-222°.
	RACON		**T(–)**		**18**		Marks best passage.
		*			*		1/04
12836 *L 3403*	-Finnenesrenna.	69° 14.0′ N 17° 58.0′ E	**Oc.(3)W.R.G.** period 10s	20 **6**	9	White lantern on concrete column.	G. 184°-200°, W.-207°30′, R.-349°, G.-008°30′, W.-025°, R.-030°.
			*			*	1/04
12843 *L 3411.2*	-Vestre Leiknesoyra.	69° 17.9′ N 17° 58.4′ E	**Iso.R.** period 2s	33 **10**	1		
*		*					1/04

Note: *Asterisks (*) indicate that column(s) in which a correction has been made or new information added.*
Denotes a new entry when preceding the station number.

CORRECTIONS TO PUB 116, LIST OF LIGHTS, 2003 EDITION

(1) No.	(2) Name and Location	(3) Position	(4) Characteristic	(5) Height	(6) Range	(7) Structure	(8) Remarks
*2345 *C 0846*	- Paludans Flak, E. side.	55° 44.0′ N 10° 35.0′ E	**Fl.(3)Y.** period 10s fl. 1s, ec. 1s fl. 1s, ec. 1s fl. 1s, ec. 5s	23 **7**	5	Wind motor.	Other wind motors, some marked by lights, exist in area.
							1/04
	SVANEKE:						
5768 *C 2530*	**-Sandkaas Odde.**	55° 07.8′ N 15° 09.4′ E	**Fl.(2)W.** period 20s fl. 1s, ec. 3s fl. 1s, ec. 15s	65 **20**	**19**	Gray square stone tower; 59.	Visible 135°-000°.
					*		1/04

Note: *Asterisks* (*****) *indicate that column(s) in which a correction has been made or new information added.*
Denotes a new entry when preceding the station number.

PUBLICATIONS AFFECTED BY NOTICE TO MARINERS
THROUGH NM 1/04

Note: * indicates New Edition/New Publication; ** indicates Publication Canceled; N indicates Not For Sale

NGA Reference No.	Ed.	Notice to Mariners No.
NGA HYDRO CATALOG CATP2V01U		
Region 1	2002	1*,2,3,4,7,8,9,10,11, 14,15,17,19,20,21, 22,23,24,25,26,27, 28,29,30,31,32,35, 36,37,38,39,40,41, 42,43,44,45,46,47, 48,50,51,52/03;1/04
Region 2	2002	1*,8,15,17,20,21,22, 23,24,26,28,30,32, 33,34,44,48,52/03
Region 3	2002	1/03*
Region 4	2002	1*,23,43/03
Region 5	2002	1*,3,5,8,22,27,30, 33,38,48/03;1/04
Region 6	2002	1*,10,11,13,16,19, 20,21,25,28,30,33, 38,50/03
Region 7	2002	1*,11,15,28/03
Region 8	2002	1*,14,37,41,46, 52/03
Region 9	2002	1*,34,40,43,45,48, 50,51,52/03;1/04
Miscellaneous Charts and Publications	2002	1*,2,4,5,6,7,9,11,12, 13,15,17,18,19,20, 21,23,24,25,27,28, 29,30,31,32,33,34, 36,37,38,39,41,42, 43,45,46,47,48,49, 51,52/03;1/04
NGA LIST OF LIGHTS		
LLPUB110	2003	7*,8,9,11,13,14,15, 16,17,18,20,21,23, 24,25,26,27,28,29, 31,32,33,34,36,37, 38,39,41,42,43,44, 47,49,50,52/03;1/04
LLPUB111	2003	33*,34,35,36,37,38, 39,40,41,43,45,47, 49,50,51,52/03;1/04
LLPUB112	2003	4*,5,6,7,8,9,10,11, 12,13,14,15,16,17, 18,19,20,21,22,23, 24,25,26,27,28,29, 30,31,32,33,34,35, 36,37,38,39,40,41, 42,43,44,45,46,47, 48,50,51,52/03;1/04
LLPUB113	2003	46*,48,49,50,51, 52/03;1/04
LLPUB114	2003	17*,19,21,22,23,24, 27,31,32,40,43,44, 46/03
LLPUB115	2003	42*,44,46,47,48,49, 51,52/03;1/04
LLPUB116	2003	24*,26,27,28,29,30, 31,32,33,34,35,36, 37,38,39,40,41,42, 43,44,45,47,48,49, 50,51/03;1/04
SAILING DIRECTIONS		
CDPUBSD125	2003	19*,43,49,51,52/03
CDPUBSD127	2003	39/03*
CDPUBSD131	2002	9/03*
CDPUBSD143	2003	46/03*
CDPUBSD145	2003	51/03*
CDPUBSD146	2002	4/03*
CDPUBSD157	2003	17/03*
CDPUBSD158	2003	24/03*
CDPUBSD191	2003	52/03*
CDPUBSD192	2003	32*,36,38,39,40,41, 42,43/03
CDPUBSD194	2002	6*,8,15,17,30,33,35, 37,38,39,40/03
SDPUB120	2001	12*,18,48,49,51/01; 8,13,14,21,22,24,29, 33,35,37,42,43,44, 45,47/02;4,6,7,8,9, 10,11,12,14,17,20, 21,23,29,30,31,41, 42,44,45,52/03
SDPUB123	2001	45*,47,48/01;1,14, 17,18,19/02;24,25, 27,28,32,38,42/03
SDPUB124	2001	18*,44,45,47,48,49, 52/01;17,19,20,21, 29,30,31,34,46, 50/02;24,25,27,28, 29,30,32,35,36,37, 39,44,48/03
SDPUB126	2002	39*,41,42,43,44,45, 48/02;24,26,27,28, 30,32,41/03
SDPUB132	2000	39*,45/00;16,17,31, 35/01;1,12,21,25, 26/02;2,10/03
SDPUB140	2001	21*,48,49,51/01;8, 17,23,32,42,43,44, 46,47,48,50/02;4,6, 7,8,9,11,12,15,19, 21,22,23,24,25,26, 31,32,34,37,42, 43/03
SDPUB141	2001	21*,38/01
SDPUB142	2000	49/00*;3,31,35/01; 1,15,43/02
SDPUB147	2001	35/01*;21,22,23, 24/02;39,40,41,46, 50/03
SDPUB148	2001	48/01*;23,24/02;22, 42,43,45,48,50, 52/03
SDPUB153	2000	6/01*;28,30,41,44, 46,47,48,52/02;1,3, 4,8,13,15,22,25,32, 35,37,38,39,40, 43/03
SDPUB154	2002	17*,19,31,42,44,45, 46,48,50/02;3,14,19, 23,30,41,42,47/03
SDPUB155	2001	31*,48/01;10,45, 46/02
SDPUB159	2002	42*,48/02
SDPUB160	2002	47*,48,49,52/02;6,8, 10,11,19,21,22,23, 30,33,36,39,41,43, 48,49,51/03;1/04
SDPUB161	2002	23*,24,44,47,48/02; 5,12/03
SDPUB162	2001	51/01*;5,12/03
SDPUB163	2002	18*,20,21,26,46, 51/02;13,24,26,27, 28,29,30,31,39,40, 41,43,47,48/03
SDPUB164	2000	30/00*;31,35,36/01; 8,28/03
SDPUB171	2001	40*,47,48,52/01;5,9, 14,16,41/02;23,24, 26,41/03
SDPUB172	2001	1*,2,3,5,6,7,8,9,14, 15,16,17,18,19,20, 22,24/02;1,11,12,13, 14,15,19,20,22,23, 25,26,27,28,29,31, 32,33,34,35,37,38, 39,40,43,44,45,46, 47,48,51/03;1/04
SDPUB173	2002	50*,51/02;3,22,24, 25,26,27,32,33,34, 37,38,49,50,51/03
SDPUB174	2000	7*,19,37,45,51, 52/01;1,5,14,19,22, 28,33,37,38,48/02; 30,39,40,41,43/03
SDPUB175	2001	41*,43,45,51/01;8, 11,12,13,14,16,17, 21,27,37,41,49/02; 26,27,29,32,37,38, 43,47/03
SDPUB180	2002	32*,33,42,47,48, 50/02;6,13,14,17,21, 24,42,44,47,48,49, 51/03
SDPUB181	2002	38*,39/02
SDPUB182	2001	8*,10,12,41/02; 17/03
SDPUB183	2001	27/01*;13,15,16/02; 18/03
SDPUB193	2000	27*,38,49/00;9,26, 27,31,32/01;14,15, 26,52/02;18,19,20, 23,29/03
SDPUB195	2002	33*,40,49,51,52/02; 1,2,3,15,16,21,32, 33,41,43,46,49/03; 1/04
SDPUB200	2002	38*,39,42/02;22,27, 34,41,51,52/03
USCG LIGHT LIST VOLUMES I - VII		
COMDTM165021	2003	17*,18,19,20,21,22, 23,24,25,26,27,28, 29,30,31,32,33,34, 36,37,38,39,40,41, 42,43,44,45,48,50, 52/03
COMDTM165022	2003	17*,18,19,20,21,22, 23,24,25,26,27,28, 29,30,31,32,33,34, 35,36,37,38,39,40, 41,42,43,44,45,46, 47,48,49,50,51, 52/03;1/04
COMDTM165023	2003	17*,18,19,20,21,23, 24,25,26,28,29,31, 32,33,34,35,36,37, 38,39,41,43,44,45, 46,47,48,49,50,51, 52/03;1/04
COMDTM165024	2003	18*,19,20,21,22,23, 24,25,26,27,28,29, 30,31,32,33,34,35, 36,37,38,39,40,41, 42,43,44,45,46,47, 48,49,50,51,52/03; 1/04
COMDTM165025	2002	16/02*
COMDTM165026	2003	18*,19,20,21,22,23, 24,25,26,27,28,29, 30,31,32,33,34,35, 36,37,38,39,40,41, 42,43,44,45,46,47, 48,49,50,51,52/03; 1/04
COMDTM165027	2003	18*,20,21,22,23,24, 26,27,28,30,31,32, 33,34,35,36,37,38, 39,40,43,44,46,47, 48,49,50,52/03;1/04
FLEET GUIDES		
FGPUB940ATL	2001	N47/01*
FGPUB941PAC	2001	N22/01*
NOS MISCELLANEOUS PUBLICATIONS		
NOSPBCATALOG1	2000	20/00*
NOSPBCATALOG2	2000	34/00*
NOSPBCATALOG3	2000	28/00*
NOSPBCATALOG4	2000	34/00*
ALMANACS		
AIRALMANAC401	2004	29/03*
NAUTALMANAC04	2004	29/03*
COAST PILOT		
NOSPBCP1	33	27*,28,29,32,33,34, 39,42,46,48/03;1/04
NOSPBCP2	32	17*,18,21,22,26,28, 30,32,33,35,36,39, 42,43,45/03
NOSPBCP3	36	34*,36,42,43,44,46, 48,50,51,52/03
NOSPBCP4	35	34*,36,39,42,44,46, 47,51/03
NOSPBCP5	31	51*,52/03;1/04
NOSPBCP6	33	23*,27,29,32,34,39, 42,46,48,51,52/03; 1/04
NOSPBCP7	35	37*,38,39,42,44,45, 48,51/03
NOSPBCP8	25	32*,33,34,39,42,48, 51/03;1/04
NOSPBCP9	21	30*,32,33,36,39,42, 48,51/03
RADIO NAVIGATIONAL AIDS		
RAPUB117	2002	50/02*;13/03

PUBLICATIONS AFFECTED BY NOTICE TO MARINERS
THROUGH NM 1/04

Note: * indicates New Edition/New Publication; ** indicates Publication Canceled; N indicates Not For Sale

NGA Reference No.	Ed.	Notice to Mariners No.
AMERICAN PRACTICAL NAVIGATOR		
NVPUB9	2002	36/02*;14,38/03
INTERNATIONAL CODE OF SIGNALS		
CDPUBNV102	2003	20/03*
WORLD PORT INDEX		
NVPUB150	2000	50/00*;14,15,16,20, 21,41,42,43,44,45, 46,47,48,49,51, 52/01;1,2,5,6,10,11, 12,16,19,21,22,27, 31,32,33,36,39,40, 42,46,49/02;2,7,10, 15,20/03
DISTANCES BETWEEN PORTS		
NVPUB151	2001	4/02*
RADAR NAVIGATION AND MANEUVERING BOARD MANUAL		
CDPUBNV1310	2001	51/01*
SIGHT REDUCTION TABLES (MARINE)		
SRPUB229V1	1970	11/71*
SRPUB229V2	1970	11/71*
SRPUB229V3	1970	7/71*
SRPUB229V4	1970	3/71*
SRPUB229V5	1970	3/71*
SRPUB229V6	1970	23/70*
SIGHT REDUCTION TABLES (AIR)		
SRPUB249V1	2000	4/01*
SRPUB249V2	1952	46/52*
SRPUB249V3	1952	46/52*
CHART NO. 1		
WOBZC1	1997	18/98*
CHART NO. 4		
WOBZC4	1988	N23/91*
ATLAS OF PILOT CHARTS		
NVPUB106	2002	42/03*
NVPUB107	1998	30/99*
NVPUB109	2001	49/02*
USCG NAVIGATION RULES		
COMDTM166722D	1999	44/99*;52/00
NOS TIDE TABLES		
NOSPBTTCWPACIN4	2004	N1/04*
NOSPBTTECSTNSA4	2004	N1/04*
NOSPBTTEURAFR4	2004	N1/04*
NOSPBTTWCSTNSA4	2004	N1/04*
TIDAL CURRENT TABLES		
NOSPBTCTATCSTN4	2004	N1/04*
NOSPBTCTPACAS4	2004	N1/04*

BROADCAST WARNINGS

Details concerning the particulars of the broadcasting of radio navigational warnings may be found in Radio Navigational Aids, Pub. 117.

NAVAREA IV

Messages in force 181200Z December 2003:

2003 series	387(GEN)	483(11,26)	487(GEN)	489(13,14)
108(26,27)	454(GEN)	484(GEN)	488(GEN)	490(GEN)

The summary of all NAVAREA IV messages in force as of 11 December 2003 is given in Section III of NM 52/03.

NAVAREA IV WARNINGS issued from 111200Z to 181200Z December 2003.

481/03 and 482/03. CANCELED.

483/03(11,26). NORTH ATLANTIC. HAZARDOUS OPERATIONS.
1. HAZARDOUS OPERATIONS:
A. 0500Z TO 0459Z COMMENCING DAILY
15 THRU 21 DEC IN AREA BOUND BY
30-45N 080-32W, 30-45N 079-40W,
30-38N 079-40W, 30-34N 080-32W.
B. 0500Z TO 0459Z COMMENCING DAILY
15 THRU 21 DEC IN AREA BETWEEN
29-10N 29-20N AND 079-40W 079-50W.
C. 1300Z TO 0700Z COMMENCING DAILY
16 THRU 19 DEC IN AREA BETWEEN
30-00N 29-50N AND 081-00W 080-50W.
2. CANCEL NAVAREA IV 482/03(GEN).
3. CANCEL THIS MSG 220559Z DEC.

(121530Z DEC 2003)

484/03(GEN).
1. NAVAREA IV MESSAGES IN FORCE 131000Z DEC 2003. ONLY THOSE MESSAGES ISSUED DURING THE LAST SIX WEEKS ARE LISTED HEREIN.
2003 SERIES: 450(11,26), 454(GEN), 476(14), 477(11,26), 479(11), 480(GEN), 483(11,26).
2. THE SUMMARY OF ALL NAVAREA IV MESSAGES IN FORCE AS OF 12 DEC 2002 IS GIVEN IN SEC III OF NM 52/02.
WARNINGS ISSUED DURING THE SUBSEQUENT QUARTERS ARE SUMMARIZED IN NM 13/03, 26/03 AND 39/03.
3. CANCEL NAVAREA IV 474/03.

(131010Z DEC 2003)

485/03 and 486/03. CANCELED.

487/03(GEN). NORTH ATLANTIC. HAZARDOUS OPERATIONS.
1. HAZARDOUS OPERATIONS 210750Z TO 210852Z DEC, ALTERNATE 220746Z TO 220848Z DEC IN AREAS BOUND BY:
A. 28-30N 080-33W, 28-28N 080-25W,
28-25N 080-22W, 28-05N 079-21W,
28-01N 079-22W, 28-22N 080-31W,
28-24N 080-36W.
B. 28-36N 080-26W, 28-30N 080-09W,
28-13N 080-15W, 28-19N 080-32W.
C. 27-39N 077-24W, 27-17N 076-23W,
26-48N 076-35W, 27-10N 077-35W.
D. 19-01N 058-24W, 15-26N 053-03W,
13-22N 054-26W, 16-57N 059-48W.
2. CANCEL THIS MSG 220948Z DEC.

(161630Z DEC 2003)

488/03(GEN). NORTH ATLANTIC. HAZARDOUS OPERATIONS.
1. HAZARDOUS OPERATIONS 180230Z TO 180617Z DEC, ALTERNATE 190226Z TO 190613Z DEC IN AREAS BOUND BY:
A. 28-34N 080-36W, 28-36N 080-25W,
28-24N 079-13W, 28-18N 079-13W,
28-23N 080-32W, 28-26N 080-37W.
B. 26-19N 063-10W, 25-26N 059-48W,
24-08N 060-13W, 25-01N 063-38W.
2. CANCEL NAVAREA IV 480/03.
3. CANCEL THIS MSG 190713Z DEC.

(162155Z DEC 2003)

489/03(13,14). MASSACHUSETTS. RADIO SERVICES.
U.S. COAST GUARD STATION BOSTON WEATHER FACSIMILE AND NAVTEX UNRELIABLE.
(170258Z DEC 2003)

490/03(GEN). MARITIME SAFETY INFORMATION DIVISION WEBSITE.
1. NGA MARITIME SAFETY INFORMATION DIVISION WEBSITE INTERMITTENTLY UNUSABLE 182000Z TO 182200Z DEC. FOR URGENT SERVICE CONTACT NGA NAVSAFETY DSN: 287 3149, COMM: 1 800 362 6289 OR 301 227 3149, E-MAIL: NAVSAFETY@NGA.MIL OR MSG TO NIMA NAVSAFETY BETHESDA MD.
2. CANCEL THIS MSG 182300Z DEC.
(171715Z DEC 2003)

HYDROLANTS

Messages in force 181200Z December 2003:

2000 series	2003 series	1731(35)	2175(24)	2271(37)	2323(37)
2937(38)	41(37)	1834(22)	2188(52)	2279(24)	2325(53)
3762(43)	67(37)	1863(37)	2193(53)	2281(56)	2329(55)
4265(44)	544(55)	1912(55)	2202(51)	2287(54)	2330(54)
2001 series	604(26,27)	1944(53)	2203(53)	2291(GEN)	2331(37)
611(44)	738(35)	1948(24)	2204(52,53)	2292(24)	2334(37)
2700(37)	754(37)	1995(53)	2215(GEN)	2294(24)	2335(24)
3161(44)	867(37)	1999(23)	2225(52,53)	2295(57)	2337(24)
2002 series	1117(37)	2031(55)	2227(53)	2297(24)	2338(51)
245(GEN)	1242(24)	2058(24)	2234(53)	2301(55)	2339(53)
246(GEN)	1291(37)	2111(53)	2235(37)	2306(56)	2340(52,53)
2203(51)	1374(52,53)	2116(24)	2241(57)	2310(55)	2341(35)
2682(51)	1422(53)	2118(57)	2257(23,24)	2312(53,54)	2343(35)
2848(37)	1472(35)	2124(54)	2258(52)	2315(23)	2345(55)
2869(52)	1553(37)	2144(22)	2263(53)	2316(GEN)	2346(GEN)
2882(54)	1620(53,56)	2159(57,61)	2264(37,51)	2318(52)	2349(24)
2883(54)	1647(51,52)	2168(57)	2266(37)	2319(53)	

The summary of all HYDROLANTS in force as of 11 December 2003 is given in Section III of NM 52/03.

HYDROLANT WARNINGS issued from 111200Z to 181200Z December 2003.

2303/03 thru 2305/03. CANCELED.

2306/03(56). EASTERN MEDITERRANEAN SEA.
1. 82 METER M/V HARLAN, SEVEN PERSONS ON BOARD, DISABLED DUE TO LEAKING SHAFT IN 33-30.6N 029-00.5E. VESSELS IN VICINITY REQUESTED TO KEEP A SHARP LOOKOUT, ASSIST IF POSSIBLE. REPORTS TO JRCC PIRAEUS, TELEX: 6012 11588, PHONE: 3021 0411 2500, FAX: 3021 0413 2398.
2. CANCEL HYDROLANT 2305/03.

(112135Z DEC 2003)

2307/03 thru 2309/03. CANCELED.

2310/03(55). BLACK SEA. GUNNERY.
1. GUNNERY EXERCISES 0700Z TO 1400Z DAILY 17 THRU 20, 22 AND 23 DEC IN AREA BOUND BY 45-07.3N 036-50.0E, 44-48.5N 036-51.2E, 44-49.6N 036-37.8E, 45-07.2N 036-44.8E.
2. CANCEL HYDROLANT 2143/03(52).
3. CANCEL THIS MSG 231500Z DEC.

(121120Z DEC 2003)

2311/03. CANCELED.

2312/03(53,54). IONIAN SEA.
MAN OVERBOARD FROM M/V FAST ARROW VICINITY 37-16N 017-00E. VESSELS IN VICINITY REQUESTED TO KEEP A SHARP LOOKOUT, ASSIST IF POSSIBLE. REPORTS TO MRSC REGGIO CALABRIA, PHONE: 3909 6565 6268, FAX: 3909 6565 6333.

(121635Z DEC 2003)

2313/03 and 2314/03. CANCELED.

2315/03(23). SOUTH ATLANTIC. ICE.
1. ICEBERGS REPORTED ON 12 DEC:
A. A-38A, 22 MILES BY 48 MILES IN 55-36.0S 032-24.0W.
B. A-38B, 22 MILES BY 25 MILES IN 55-36.0S 034-24.0W.
C. A-38C, SEVEN MILES BY 11 MILES IN 52-36.0S 036-24.0W.
D. A-38D, TWO MILES BY TEN MILES IN 54-24.0S 033-24.0W.
E. A-43B, 13 MILES BY 40 MILES IN 54-24.0S 039-06.0W.
F. A-43I, TWO MILES BY 12 MILES IN 53-24.0S 040-24.0W.
G. A-48, NINE MILES BY TEN MILES IN 57-00.0S 043-18.0W.
H. IN 59-48.7S 057-17.9W.
I. IN 59-45.7S 056-48.6W.
J. IN 59-42.8S 056-51.5W.
2. CANCEL HYDROLANT 2272/03(51), OPERATIONS COMPLETED.

3. CANCEL THIS MSG 20 DEC.

(130222Z DEC 2003)

2316/03(GEN).
1. HYDROLANT MESSAGES IN FORCE 131200Z DEC 2003. ONLY THOSE MESSAGES ISSUED DURING THE LAST SIX WEEKS ARE LISTED HEREIN. 2003 SERIES: 2058(24), 2111(53), 2116(24), 2118(57), 2124(54), 2144(22), 2159(57,61), 2168(57), 2175(24), 2188(52), 2193(53), 2202(51), 2203(53), 2204(52,53), 2214(53), 2215(GEN), 2225(52,53), 2227(53), 2234(53), 2235(37), 2241(57), 2257(23,24), 2258(52), 2263(53), 2264(37,51), 2266(37), 2271(37), 2279(24), 2280(56), 2281(56), 2286(37), 2287(54), 2291(GEN), 2292(24), 2294(24), 2295(57), 2296(24), 2297(24), 2299(51), 2301(55), 2306(56), 2307(53), 2310(55), 2311(24), 2312(53,54), 2313(24), 2314(24), 2315(23).
2. THE SUMMARY OF ALL HYDROLANT MESSAGES IN FORCE AS OF 12 DEC 2002 IS GIVEN IN SEC III OF NM 52/02. WARNINGS ISSUED DURING THE SUBSEQUENT QUARTERS ARE SUMMARIZED IN NM 13/03, 26/03 AND 39/03.
3. CANCEL HYDROLANT 2021/03, 2054/03, 2130/03, 2277/03, 2289/03, 2304/03, 2309/03.

(131220Z DEC 2003)

2317/03. CANCELED.

2318/03(52). ALGERIA.
CHART 52060 (16TH ED).
JETEE DU LARGE LIGHT 35-43.2N 000-37.6W UNLIT.

(131525Z DEC 2003)

2319/03(53). SICILIA-EAST COAST.
CHART 53200 (6TH ED).
CAPO MOLINI LIGHT 37-34.6N 015-10.6E AT REDUCED INTENSITY.

(131537Z DEC 2003)

2320/03 thru 2322/03. CANCELED.

2323/03(37). DOVER STRAIT.
CHART 37125 (15TH ED).
RUYTINGEN SOUTHEAST BUOY 51-09N 002-09E UNLIT.

(140337Z DEC 2003)

2324/03. CANCELED.

2325/03(53). STRAIT OF SICILY.
1. CONTAINER ADRIFT VICINITY 35-28.3N 012-30.3E.
2. CANCEL THIS MSG 21 DEC.

(141600Z DEC 2003)

2326/03 thru 2328/03. CANCELED.

2329/03(55). BLACK SEA. GUNNERY.
1. GUNNERY EXERCISES 0730Z TO 1300Z DAILY 19 AND 22 DEC IN AREA BOUND BY 44-43.8N 032-52.2E, 44-34.8N 032-37.4E, 44-39.0N 032-11.5E, 44-48.4N 032-08.2E, 45-00.2N 032-14.2E, 44-52.2N 032-41.6E.
2. CANCEL THIS MSG 221400Z DEC.

(151225Z DEC 2003)

2330/03(54). EASTERN MEDITERRANEAN SEA.
DISTRESS SIGNAL RECEIVED FROM M/V DINA K IN 36-00N 035-42E. VESSELS IN VICINITY REQUESTED TO KEEP A SHARP LOOKOUT, ASSIST IF POSSIBLE. REPORTS TO RCC LARNACA, INMARSAT-C: 4210 99999, TELEX: 6054158, PHONE: 357 2430 4737, FAX: 357 2464 3254.

(151310Z DEC 2003)

2331/03(37). ENGLAND-EAST COAST.
CABLE LAYING OPERATIONS IN PROGRESS UNTIL FURTHER NOTICE BY BARGE PONTRA MARIS VICINITY 52-37.5N 001-46.0E. WIDE BERTH REQUESTED.

(151455Z DEC 2003)

2332/03 and 2333/03. CANCELED.

2334/03(37). DOVER STRAIT.
CHART 37129 (6TH ED).
BERGUES BUOY 51-17N 002-19E UNLIT.
(160029Z DEC 2003)

2335/03(24). BRAZIL-SOUTH COAST.
1. SEISMIC SURVEY IN PROGRESS UNTIL 200159Z DEC
BY M/V CGG HARMATTAN TOWING SIX 6000 METER
LONG CABLES ALONG TRACKLINE BETWEEN
25-24S 045-06W AND 25-56S 046-00W.
FOUR MILE BERTH REQUESTED.
2. CANCEL THIS MSG 200259Z DEC.
(160433Z DEC 2003)

2336/03. CANCELED.

2337/03(24). BRAZIL-EAST COAST.
1. SEISMIC SURVEY IN PROGRESS UNTIL 18 DEC
BY M/V VERITAS VIKING I TOWING EIGHT
6000 METER LONG CABLES IN AREA BETWEEN
15-11S 15-39S AND 038-39W 037-57W.
SIX MILE BERTH REQUESTED.
2. CANCEL THIS MSG 19 DEC.
(160517Z DEC 2003)

2338/03(51). NORTH ATLANTIC.
1. UNDERWATER OPERATIONS IN PROGRESS UNTIL FURTHER
NOTICE BY M/V SONNE ALONG TRACKLINE BETWEEN
35-26N 007-15W AND 34-39N 009-12W.
2. CANCEL HYDROLANT 2299/03.
(161045Z DEC 2003)

2339/03(53). SICILIA-EAST COAST. GUNNERY.
1. GUNNERY EXERCISES 0700Z TO 1500Z DAILY
18 AND 19 DEC WITHIN THREE MILES OF 37-18N 015-23E.
2. CANCEL THIS MSG 191600Z DEC.
(161645Z DEC 2003)

2340/03(52,53). STRAIT OF SICILY.
CHART 52170 (3RD ED).
PUNTA SPADILLO LIGHT 36-49.3N 012-00.7E UNLIT.
(161735Z DEC 2003)

2341/03(35). SCOTLAND-NORTH COAST.
CHART 35200 (7TH ED).
RACON AT SULE SKERRY LIGHT 59-05N 004-24W INOPERATIVE.
(161750Z DEC 2003)

2342/03. CANCELED.

2343/03(35). ORKNEY ISLANDS.
CHART 35200 (7TH ED).
TOR NESS LIGHT 58-47N 003-18W AT REDUCED INTENSITY.
(170150Z DEC 2003)

2344/03. CANCELED.

2345/03(55). BLACK SEA. MISSILES.
1. HAZARDOUS OPERATIONS 0300Z TO 1600Z DAILY
22 THRU 28 DEC IN AREA BOUND BY
45-05.1N 036-58.1E, 44-40.6N 037-11.3E,
44-07.2N 037-11.3E, 44-05.3N 036-52.5E,
44-07.2N 036-33.0E, 44-40.6N 036-33.7E,
45-05.1N 036-33.7E, 45-06.6N 036-52.5E.
2. CANCEL THIS MSG 281700Z DEC.
(170855Z DEC 2003)

2346/03(GEN). MARITIME SAFETY INFORMATION DIVISION WEBSITE.
1. NGA MARITIME SAFETY INFORMATION DIVISION WEBSITE INTERMITTENTLY
UNUSABLE 182000Z TO 182200Z DEC. FOR URGENT SERVICE CONTACT NGA
NAVSAFETY DSN: 287 3149, COMM: 1 800 362 6289 OR 301 227 3149,
E-MAIL: NAVSAFETY@NGA.MIL OR MSG TO NIMA NAVSAFETY BETHESDA MD.
2. CANCEL THIS MSG 182300Z DEC.
(171730Z DEC 2003)

2347/03 and 2348/03. CANCELED.

2349/03(24). BRAZIL-NORTH COAST.
1. SEISMIC SURVEY IN PROGRESS UNTIL 210300Z DEC BY
M/V RAMFORM VIKING TOWING EIGHT 6000 METER
LONG CABLES IN AREA BOUND BY
02-50S 038-27W, 02-53S 038-23W,
03-16S 038-34W, 03-13S 038-40W.
FIVE MILE BERTH REQUESTED.
2. CANCEL HYDROLANT 2327/03.
3. CANCEL THIS MSG 210400Z DEC.

(180440Z DEC 2003)

NAVAREA XII

Messages in force 181200Z December 2003:

2003 series	351(19)	368(18)	375(GEN)
262(GEN)	352(GEN)	372(GEN)	376(16,96)

The summary of all NAVAREA XII messages in force as of 11 December 2003 is given in Section III of NM 52/03.

NAVAREA XII WARNINGS issued from 111200Z to 181200Z December 2003.

369/03 thru 371/03. CANCELED.

372/03(GEN).
1. NAVAREA XII MESSAGES IN FORCE 131000Z DEC 2003. ONLY THOSE MESSAGES ISSUED DURING THE LAST SIX WEEKS ARE LISTED HEREIN. 2003 SERIES: 351(19), 352(GEN), 366(18,19), 367(16,96), 368(18).
2. THE SUMMARY OF ALL NAVAREA XII MESSAGES IN FORCE AS OF 12 DEC 2002 IS GIVEN IN SEC III OF NM 52/02. WARNINGS ISSUED DURING THE SUBSEQUENT QUARTERS ARE SUMMARIZED IN NM 13/03, 26/03 AND 39/03.
3. CANCEL NAVAREA XII 363/03.

(131020Z DEC 2003)

373/03 and 374/03. CANCELED.

375/03(GEN). MARITIME SAFETY INFORMATION DIVISION WEBSITE.
1. NGA MARITIME SAFETY INFORMATION DIVISION WEBSITE INTERMITTENTLY UNUSABLE 182000Z TO 182200Z DEC. FOR URGENT SERVICE CONTACT NGA NAVSAFETY DSN: 287 3149, COMM: 1 800 362 6289 OR 301 227 3149, E-MAIL: NAVSAFETY@NGA.MIL OR MSG TO NIMA NAVSAFETY BETHESDA MD.
2. CANCEL THIS MSG 182300Z DEC.

(171740Z DEC 2003)

376/03(16,96). NORTH PACIFIC. ALASKA.
1. LORAN-C STATION ST PAUL, RATE 9990-MASTER, OFF AIR 182200Z TO 190200Z DEC.
2. CANCEL THIS MSG 190300Z DEC.

(180001Z DEC 2003)

HYDROPACS

Messages in force 181200Z December 2003:

2001 series	895(62)	1699(63)	1980(76,83)	2070(81)	2163(74)
1976(62)	960(63)	1700(62)	1982(GEN)	2079(61)	2166(23)
2002 series	992(62)	1732(75)	1983(57,61)	2082(81)	2167(82)
205(GEN)	993(62)	1733(75)	1991(73,74)	2091(74)	2168(GEN)
206(GEN)	998(71)	1734(74)	1998(61)	2095(62)	2170(63)
403(72,73)	1041(71)	1736(63)	2004(73,74)	2097(75)	2171(63)
2191(22)	1198(92)	1745(96)	2021(93,94)	2106(73)	2173(63)
2199(63)	1213(73)	1777(63)	2027(75)	2107(73)	2175(63)
2330(62)	1220(62)	1785(96)	2028(96)	2108(73)	2178(63)
2339(63)	1222(62)	1794(62)	2030(74)	2109(73)	2179(63)
2003 series	1248(63)	1801(96)	2039(81,82)	2110(73)	2180(63)
167(95)	1266(73)	1834(73,74)	2045(95)	2111(63)	2181(74)
197(71)	1330(62)	1892(73)	2046(95)	2115(73)	2186(63)
207(62)	1371(71,93)	1893(73)	2047(94,95)	2123(61)	2187(63)
445(96)	1395(62)	1906(19,97)	2048(94,95)	2134(63)	2188(63)
495(62)	1398(74)	1911(62)	2049(94,95)	2138(91,93)	2189(GEN)
496(62)	1485(22)	1914(96,97)	2050(95)	2139(76)	2191(81)
506(62)	1514(62)	1949(74)	2051(GEN)	2140(GEN)	2192(62)
515(73)	1518(62)	1952(61)	2056(81)	2141(62)	2194(97)
638(62)	1652(63)	1959(76)	2057(61)	2143(81,97)	
760(63)	1653(63)	1971(72)	2062(63)	2154(75)	
761(63)	1655(29)	1975(73,74)	2063(96)	2158(62)	
801(72)	1697(61)	1979(81)	2065(81,97)	2159(63)	

The summary of all HYDROPACS in force as of 11 December 2003 is given in Section III of NM 52/03.

HYDROPAC WARNINGS issued from 111200Z to 181200Z December 2003.

2162/03. CANCELED.

2163/03(74). AUSTRALIA-NORTH COAST.
1. DERELICT 18 METER F/V PARTIALLY SUBMERGED AND ADRIFT IN 11-03S 133-48E AT 120525Z DEC.
2. CANCEL THIS MSG 19 DEC.

(120710Z DEC 2003)

2164/03 and 2165/03. CANCELED.

2166/03(23). SOUTH ATLANTIC. ICE.
1. ICEBERGS REPORTED ON 12 DEC IN:
A. 59-48.7S 057-17.9W.
B. 59-45.7S 056-48.6W.
C. 59-42.8S 056-51.5W.
2. CANCEL THIS MSG 20 DEC.

(130234Z DEC 2003)

2167/03(82). SOUTH PACIFIC. SOLOMON ISLANDS.
MAN OVERBOARD FROM M/V MOIKA VICINITY 08-42S 159-53E AT 121200Z DEC. VESSELS IN VICINITY REQUESTED TO KEEP A SHARP LOOKOUT, ASSIST IF POSSIBLE.
REPORTS TO MRCC SOLOMON ISLANDS, PHONE: 0011 6772 1609 OR RCC AUSTRALIA, TELEX: 7162025, PHONE: 612 6230 6811, FAX: 612 6230 6868.

(130710Z DEC 2003)

2168/03(GEN).
1. HYDROPAC MESSAGES IN FORCE 131200Z DEC 2003. ONLY THOSE MESSAGES ISSUED DURING THE LAST SIX WEEKS ARE LISTED HEREIN.
2003 SERIES: 1906(19,97), 1911(62), 1914(96,97), 1949(74), 1952(61), 1959(76), 1971(72), 1973(63), 1975(73,74), 1979(81), 1980(76,83), 1982(GEN), 1983(57,61), 1991(73,74), 1998(61), 2004(73,74), 2021(93,94), 2027(75), 2028(96), 2030(74), 2039(81,82), 2045(95), 2046(95), 2047(94,95), 2048(94,95), 2049(94,95), 2050(95), 2051(GEN), 2056(81), 2057(61), 2062(63), 2063(96), 2065(81,97), 2070(81), 2079(61), 2082(81), 2091(74), 2095(62), 2097(75), 2102(63), 2106(73), 2107(73), 2108(73), 2109(73), 2110(73), 2111(63), 2115(73), 2121(62), 2123(61), 2129(63), 2134(63), 2138(91,93), 2139(76), 2140(GEN), 2141(62), 2143(81,97), 2148(74), 2154(75), 2158(62), 2159(63), 2161(74), 2163(74), 2166(23), 2167(82).
2. THE SUMMARY OF ALL HYDROPAC MESSAGES IN FORCE

AS OF 12 DEC 2002 IS GIVEN IN SEC III OF NM 52/02.
WARNINGS ISSUED DURING THE SUBSEQUENT QUARTERS
ARE SUMMARIZED IN NM 13/03, 26/03 AND 39/03.
3. CANCEL HYDROPAC 352/02, 525/03, 1267/03, 1688/03,
1872/03, 1887/03, 1890/03, 2090/03, 2131/03, 2162/03.

(131240Z DEC 2003)

2169/03. CANCELED.

2170/03(63). INDIA-WEST COAST. HAZARDOUS OPERATIONS.
1. HAZARDOUS OPERATIONS 0230Z TO 1230Z DAILY 14 THRU 21 DEC
IN AREA BETWEEN 15-13N 15-11N AND 073-57E 073-52E.
2. CANCEL THIS MSG 211330Z DEC.

(131428Z DEC 2003)

2171/03(63). INDIA-WEST COAST. HAZARDOUS OPERATIONS.
1. HAZARDOUS OPERATIONS 0230Z TO 1130Z DAILY
15 THRU 21 DEC WITHIN 25 MILES OF
14-01.0N 074-19.6E.
2. CANCEL THIS MSG 211230Z DEC.

(131456Z DEC 2003)

2172/03. CANCELED.

2173/03(63). INDIA-WEST COAST. HAZARDOUS OPERATIONS.
1. HAZARDOUS OPERATIONS 0330Z TO 1530Z DAILY 16 THRU 19 DEC
IN AREA BOUND BY
09-57.6N 075-59.5E, 09-57.7N 076-14.2E,
09-40.0N 076-14.5E, 09-42.5N 076-09.5E.
2. CANCEL THIS MSG 191630Z DEC.

(131618Z DEC 2003)

2174/03. CANCELED.

2175/03(63). INDIA-WEST COAST.
1. SEISMIC SURVEY IN PROGRESS UNTIL 31 DEC BY
M/V RAMFORM CHALLANGER TOWING EIGHT 6000 METER
LONG CABLES IN AREA BOUND BY 20-47.2N 069-12.4E,
20-54.0N 069-20.8E, 20-33.0N 069-40.0E,
20-24.9N 069-29.9E, 20-29.2N 069-26.0E,
20-30.5N 069-27.6E.
WIDE BERTH REQUESTED.
2. CANCEL THIS MSG 01 JAN 04.

(131749Z DEC 2003)

2176/03 and 2177/03. CANCELED.

2178/03(63). INDIA-EAST COAST. HAZARDOUS OPERATIONS.
1. HAZARDOUS OPERATIONS 180030Z TO 181230Z DEC
IN AREA BOUND BY 19-14.6N 084-53.7E,
19-10.5N 085-01.0E, 19-01.7N 084-56.8E,
19-05.1N 084-48.4E, 19-12.6N 084-51.6E.
2. CANCEL THIS MSG 181330Z DEC.

(151200Z DEC 2003)

2179/03(63). INDIA-WEST COAST. ROCKETS.
1. HAZARDOUS OPERATIONS 1330Z TO 1600Z DAILY
17 THRU 23 DEC WITHIN 75 MILES OF 08-31.9N 076-52.1E.
2. CANCEL THIS MSG 231700Z DEC.

(151205Z DEC 2003)

2180/03(63). INDIA-EAST COAST. HAZARDOUS OPERATIONS.
1. HAZARDOUS OPERATIONS 180130Z TO 180630Z AND
181130Z TO 181530Z DEC IN AREA BOUND BY
17-42.2N 083-18.6E, 17-42.1N 083-29.9E,
17-36.7N 083-28.5E, 17-32.7N 083-24.3E.
2. CANCEL THIS MSG 181630Z DEC.

(151210Z DEC 2003)

2181/03(74). GULF OF CARPNETARIA.
DISTRESS SIGNAL RECEIVED ON 121.5 MHZ IN 12-44.6S 141-45.0E
AT 151004Z DEC. VESSELS IN VICINITY REQUESTED TO KEEP A
SHARP LOOKOUT, ASSIST IF POSSIBLE. REPORTS TO RCC AUSTRALIA,
TELEX: 7162025, PHONE: 612 6230 6811, FAX: 612 6230 6868.

(151725Z DEC 2003)

2182/03 thru 2185/03. CANCELED.

2186/03(63). INDIA-WEST COAST.
1. SEISMIC SURVEY 18 DEC THRU 05 JAN BY
M/V VERITAS SEARCHER TOWING 6000 METER
LONG CABLE IN AREA BOUND BY
22-31.5N 067-56.5E, 22-12.6N 067-47.0E,
21-09.6N 067-47.8E, 21-09.6N 068-15.8E,
21-48.3N 068-15.3E.
WIDE BERTH REQUESTED.
2. CANCEL THIS MSG 06 JAN 04.

(170535Z DEC 2003)

2187/03(63). INDIA-WEST COAST.
1. SEISMIC SURVEY IN PROGESS UNTIL 20 JAN BY
M/V C-ORION TOWING SIX 6000 METER LONG
CABLES IN AREA BOUND BY
22-45.5N 068-30.1E, 22-40.9N 068-34.3E,
22-34.0N 068-33.3E, 22-22.6N 068-28.3E,
22-39.4N 068-19.0E, 22-54.5N 068-10.8E,
22-54.5N 068-15.2E.
WIDE BERTH REQUESTED.
2. CANCEL HYDROPAC 2174/03.
3. CANCEL THIS MSG 21 JAN 04.

(170600Z DEC 2003)

2188/03(63). INDIA-EAST COAST.
CHART 63320 (8TH ED).
DGPS STATION AT SAGAR ISLAND LIGHT
21-39.4N 088-03.1E OFF AIR.

(170633Z DEC 2003)

2189/03(GEN). MARITIME SAFETY INFORMATION DIVISION WEBSITE.
1. NGA MARITIME SAFETY INFORMATION DIVISION WEBSITE INTERMITTENTLY
UNUSABLE 182000Z TO 182200Z DEC. FOR URGENT SERVICE CONTACT NGA
NAVSAFETY DSN: 287 3149, COMM: 1 800 362 6289 OR 301 227 3149,
E-MAIL: NAVSAFETY@NGA.MIL OR MSG TO NIMA NAVSAFETY BETHESDA MD.
2. CANCEL THIS MSG 182300Z DEC.

(171745Z DEC 2003)

2190/03. CANCELED.

2191/03(81). NORTH PACIFIC.
DISTRESS SIGNAL RECEIVED ON 121.5 MHZ IN 14-09.5N 134-08.7E
AT 171128Z DEC. VESSELS IN VICINITY REQUESTED TO
KEEP A SHARP LOOKOUT, ASSIST IF POSSIBLE. REPORTS
TO U.S. COAST GUARD GUAM, PHONE: 671 339 6100.

(172204Z DEC 2003)

2192/03(62).
CANCEL HYDROPAC 1809/03, 1866/03 AND THIS MSG.

(180602Z DEC 2003)

2193/03. CANCELED.

2194/03(97). NORTH PACIFIC.
DISTRESS SIGNAL RECEIVED ON 406 MHZ FROM M/V OOCL ROTTERDAM
IN 39-27-50N 149-51-46E AT 180941Z DEC. VESSELS IN VICINITY
REQUESTED TO KEEP A SHARP LOOKOUT, ASSIST IF POSSIBLE.
REPORTS TO JAPAN COAST GUARD.

(181128Z DEC 2003)

MARAD ADVISORIES

MARAD ADVISORIES rapidly disseminate information on government policy, danger and safety issues pertaining to vessel operations and other timely maritime matters. They are periodically issued by the U.S. Maritime Administration (MARAD) to vessel masters, operators, and other U.S. maritime interests.

The text of all in-force MARAD ADVISORIES may be obtained by accessing the NGA Maritime Safety Information website (http://164.214.12.145/warn/warn_j_query.html), by referring to Section I (paragraph 50) of this Notice for those in-force as of 18 December 2003, or by contacting the Maritime Administration Office of Ship Operations, Code MAR-613, Room 2123, 400 Seventh Street S.W., Washington DC 20590, Telephone (202) 366-5735, FAX (202) 366-3954, TLX II 710-822-9426 (MARAD DOT WSH).

MARAD ADVISORIES in force 18 December 2003: 00-7, 01-1, 01-7, 02-2, 02-5, 02-7 and 03-4.

SPECIAL WARNINGS

SPECIAL WARNINGS, primarily intended to announce official government proclamations affecting shipping, are broadcast as needed. They are numbered consecutively and further promulgated in the Notice to Mariners.

The text of all in-force SPECIAL WARNINGS may be obtained by accessing the NGA Maritime Safety Information website (http://164.214.12.145/warn/warn_j_query.html) or by referring to Section I (paragraph 7) of this Notice for those in-force as of 18 December 2003.

SPECIAL WARNINGS in force 18 December 2003: 1, 29, 77, 81, 82, 89, 92, 95, 107, 108, 111, 113, 114, 115, 116, 117, 118, 119, 120 and 121.

MARINE INFORMATION

NATIONAL OCEAN SERVICE OFFICES

Information concerning National Ocean Service (NOS) charts and related publications can be obtained by addressing;

Director, Coast Survey, N/CS
National Ocean Service, NOAA
1315 East-West Highway
Silver Spring, MD 20910-2729
Telephone: 301-713-2770

Information concerning the sale of NOS and/or NIMA products can be obtained by addressing:

FAA, National Aeronautical Charting Office
Distribution Division, AVN-530
6303 Ivy Lane, Suite 400
Greenbelt, MD 20770
Telephone: 1-800-638-8972 (within the U.S. only); 301-436-8301
Fax: 301-436-6829
E-Mail address: 9-AMC-Chartsales@faa.gov
Website: http://naco.faa.gov/

U.S. ARMY CORPS OF ENGINEERS

OFFICE OF THE CHIEF OF ENGINEERS, USACE
ATTN.: CECW-OD
441 G. STREET, N.W.
WASHINGTON, D.C. 20314-1000
TELEPHONE: (202) 761-4665

DISTRICT OFFICES (COASTAL)

New England, MA 01742-2751	696 Virginia Road, Concord, Tel. 978-318-8321
Detroit, MI 48226-2575	Patrick McNamara Bldg., 477 Michigan Ave., Tel. 313-226-6794
Buffalo, NY 14207-3199	1776 Niagara St., Tel. 716-879-4297
Chicago, IL 60606-7206	111 N. Canal St., Tel. 312-353-6400
New York, NY 10278-0090	26 Federal Plaza., Tel. 212-264-9094
Philadelphia, PA 19107-3390	The Wanamaker Bldg., 100 Penn Square East, Tel. 215-656-6721
Baltimore, MD 21203-1715	10 S. Howard St., Tel. 410-962-4646
Norfolk, VA 23510-1096	803 Front St., Tel. 757-441-7649
Wilmington, NC 28402-1890	69 Darlington Ave., Tel. 910-251-4814
Charleston, SC 29403-5107	69-A Hagood Ave., Tel. 843-329-8114
Savannah, GA 31402-0889	100 W. Oglethorpe Ave., Tel. 912-652-5341
Jacksonville, FL 32207-8175	701 San Marco Blvd., Tel. 904-232-3765
Mobile, AL 36628-0001	109 St. Joseph St., Tel. 334-690-2576
New Orleans, LA 70118-0267	7400 Leake Ave., Tel. 504-862-2328
Galveston, TX 77553-1229	2000 Ft. Point Rd., Tel. 409-766-3966
Anchorage, AK 99506-0898	Bldg. 21-700, Elmendorf Air Force Base, Tel. 907-753-2753
Los Angeles, CA 90053-2325	911 Wilshire Blvd., Tel. 213-452-3349
San Francisco, CA 94105-1905	333 Market St., Room 923, Tel. 415-977-8444
Portland, OR 97204-3495	Robert Duncan Plaza, 333 S.W. 1st Avenue, Tel. 503-808-4300
Seattle, WA 98134-2385	4735 East Marginal Way South, Tel. 206-764-3431
Sacramento, CA 95814-2922	1325 J St., Tel. 916-557-7701

U.S. ARMY CORP OF ENGINEERS DIVISION OFFICES (COASTAL)

North Atlantic	Building 301, Tel. 718-491-8707 Fort Hamilton Military Community Brooklyn, New York 11252-6700
South Atlantic	60 Forsyth Street S.W., Tel. 404-562-6740 Atlanta, Georgia 30303-8801
Mississippi Valley	1400 Walnut Street, Tel. 601-634-5868 Vicksburg, Mississippi 39180-0080
Southwestern	1100 Commerce Street, Tel. 214-767-2429 Dallas, Texas 75242-0216
South Pacific	333 Market Street, Room 1101, Tel. 415-977-8031 San Francisco, California 94105-2195
Northwestern	220 Northwest 8th Street, Tel. 503-808-3880 Portland, Oregon 97208-2870
Great Lakes and Ohio River	550 Main Street, Tel. 513-684-3057 Cincinnati, Ohio 45202-2215
Pacific Ocean	Building 230, Tel. 808-438-8880 Ft. Shafter, Hawaii 96858-5440

UNITED STATES COAST GUARD DISTRICT OFFICES

Commander, 1st Coast Guard District, 408 Atlantic Ave., Boston, MA 02110-3350.
Phone, Day 617-223-8338, Night 617-223-8558.
Commander, 5th Coast Guard District, Federal Bldg., 431 Crawford St., Portsmouth, VA 23704-5004.
Phone, Day 804-398-6486, Night 804-398-6231.
Commander, 7th Coast Guard District, Brickell Plaza Federal Bldg., 909 S.E. 1st Ave., Miami, FL 33131-3050.
Phone, Day 305-536-5621, Night 305-536-5611.
Commander, 8th Coast Guard District, Hale Boggs Federal Bldg., 501 Magazine St., New Orleans, LA 70130-3396.
Phone, Day 504-589-6277, Night 504-589-6225.
Commander, 9th Coast Guard District, 1240 East 9th St., Cleveland, OH 44199-2060.
Phone, Day 216-902-6060, Night 216-902-6117.
Commander, 11th Coast Guard District, Coast Guard Island, Building 50-6, Alameda, CA 94501-5100.
Phone, Day 510-437-2976, Night 510-437-3700.
Commander, 13th Coast Guard District, Federal Building, 915 Second Ave., Seattle, WA 98174-1067.
Phone, Day 206-220-7270, Night 206-220-7004.
Commander, 14th Coast Guard District, Prince Kalanianaole Federal Bldg., Room 9139, 300 Ala Moana Blvd., Honolulu, HI 96580-4982.
Phone, Day 808-541-2315, Night 808-541-2500.
Commander, 17th Coast Guard District, P.O. Box 25517, Juneau, AK 99802-5517.
Phone, Day 907-463-2272, Night 907-463-2004.

MARINE INFORMATION REPORT AND SUGGESTION SHEET INSTRUCTIONS

We value your suggestions to improve our products. The Marine Information Report and Suggestion Sheet is provided for users to submit corrective information. Please be complete and accurate in your description/suggestion and include the information as detailed below:

Observer: name(s) of person(s) making observation and rank, rate or title.
Ship/Organization: name of vessel or organization.
Address: complete mailing address. Also include telephone number, fax, and/or e-mail address, if available, in case clarification is required.
Date of Observation: day, month and year at which the observation was made.
Time of Observation: local time at which the observation was made.
Latitude/Longitude: exact position of the observation expressed as accurately as possible.
Datum: horizontal datum to which the observed position is referred (e.g. WGS, NAD83, local foreign datum, etc.).
Navigation System: method used to determine the position of the observation (e.g. radar, GPS, Loran, etc.). Include details about the equipment used, if deemed pertinent.
Verified by Navigator: indicate whether observation was verified by navigator.
Product(s) Affected: product number(s) and/or name(s) to which the observation applies (e.g. Chart 62400, Sailing Directions Pub. 127, etc.).
Edition: edition number and/or year of affected product.
Latest correction applied: the latest Notice to Mariners to which your copy of affected product has been corrected.
Sounding sensor or method used: equipment or method used to collect soundings. When reporting soundings, please provide an annotated echogram, if available, for verification.
Soundings corrected for draft: indicate whether soundings have been corrected for vessel's draft. If not, please include observed draft along with the details of information reported.
Details of Information Reported: use this space to provide details of the observation/suggestion. When referring to a charted feature, please describe it exactly as it appears on the chart. When referring to a publication, please indicate page number(s) and line number(s) or station number(s) as applicable. Use additional sheets as necessary and include diagrams, photocopies of the product(s) involved and/or photographs to describe observations in greater detail. If possible, include the designation, point of contact, telephone number, fax number and/or e-mail address of the local port authority to enable NGA to update our records and obtain additional or later information.
User Feedback: use this space to provide feedback and suggestions for improving NGA products and services.

Please detach, fold and mail the pre-addressed form and include any other relevant material or supporting information.

Reports which present an immediate hazard to navigation should be sent to the nearest NAVAREA Coordinator via coast radio stations. In general, these hazards would include major aids to navigation anomalies, discovery of obstructions or shoals with depths of less than 30 meters, floating dangers to shipping, and any situation deemed critical to safety of life at sea. For further information consult Notice to Mariners No. 1, paragraph 44 (Worldwide Navigational Warnings Service).

Due to the large volume of information received, NGA cannot acknowledge receipt of every report. Some reports containing useful data are filed for use in the compilation of the next edition of the affected product. Others confirm or clarify previously reported information. Echogram traces are digitized and become part of out Bathymetric Database. Acknowledgment is made by inclusion in the Observer's List of the Notice to Mariners (page ii), or in some cases by letter from the Agency involved.

For additional information about various Hydrographic Reports, consult The American Practical Navigator (Chapter 30).

MARINE INFORMATION REPORT AND SUGGESTION SHEET

Observer _____ Ship/Organization _____

Address _____

_____

Email address _____

Date of Observation _____ Time of Observation (Local) _____

Latitude _____ Longitude _____ Datum _____

Navigation System _____ Verified by Navigator: Yes_____ No_____

Product(s) Affected _____ Edition _____

Latest correction applied: N.M. _____

Sounding sensor or method used _____ Sounding(s) corrected for draft: Yes ____ No _____

Details of Information Reported (continue on additional sheets as necessary) _____

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User Feedback (continue on additional sheets as necessary)

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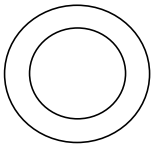

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MARITIME SAFETY INFORMATION DIVISION
ST D44
NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY
4600 SANGAMORE ROAD
BETHESDA MD 20816-5003

ARCTIC MARITIME SAFETY INFORMATION REPORT SHEET

Observer _____

Ship/Organization _____

Phone _____ Email Address_____

Describe Hazard (e.g. dredge, buoy, current meter, operations):_____

_____

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_____

Depth water column is occupied (e.g. “bottom to surface”, “surface to 500m”): _____

_____

Date of Insertion _____ Date of Removal _____

If observed, Date _____ Time (Local) _____

Latitude _____ Longitude _____ Datum _____

Navigation System _____ Verified by Navigator: Yes _____ No _____

Sounding sensor or method used _____

Sounding(s) corrected for draft: Yes _____ No _____

Details of Information Reported (continue on additional sheets as necessary): _____

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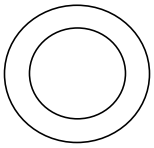

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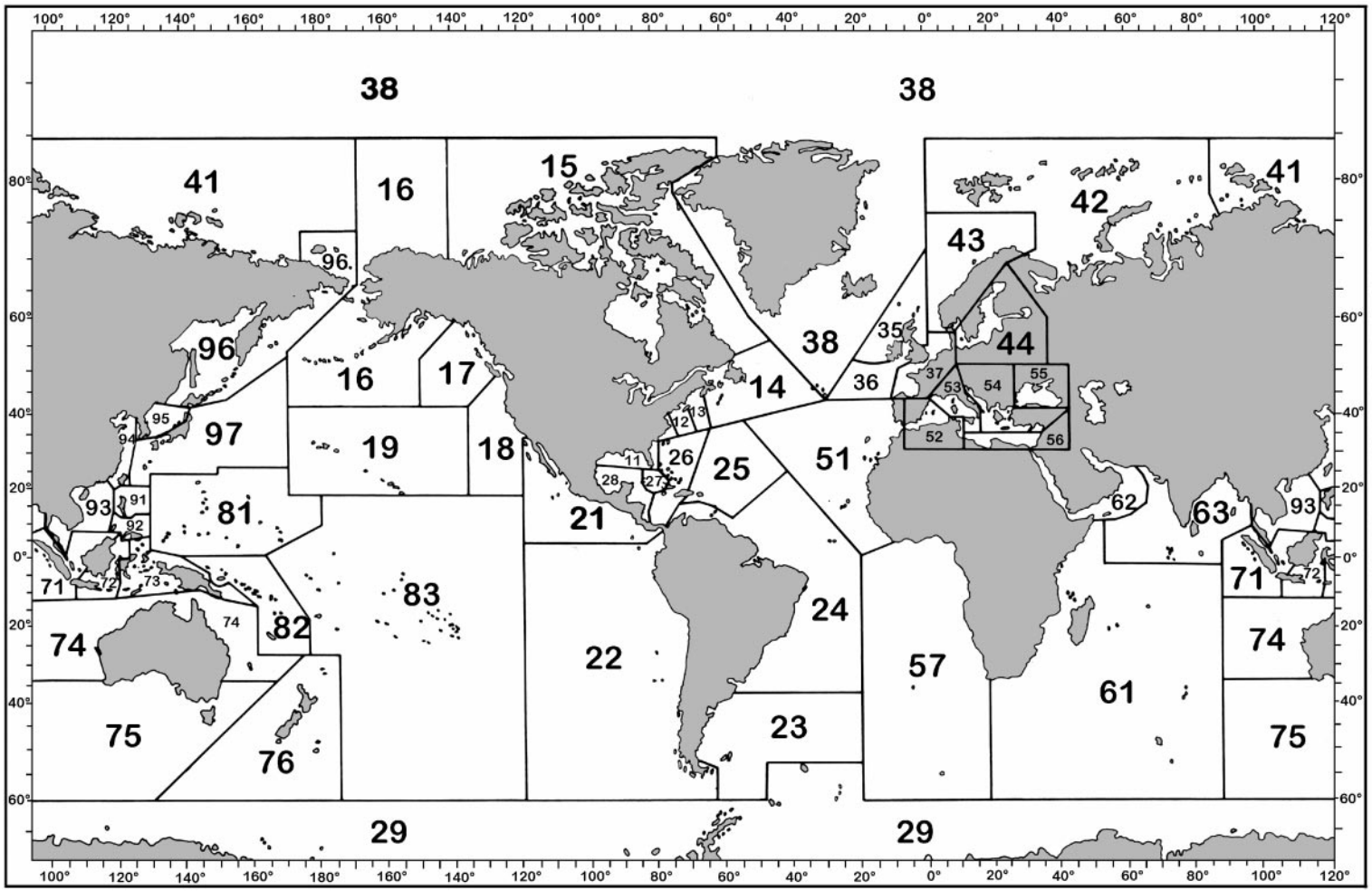

For chart numbering purposes, the world is divided into nine regions, each corresponding to the geographic limits of one of the nine regions in the NGA Catalog of Maps, Charts, and Related Products, Part 2-Hydrographic Products, Volume 1. Each Region is further subdivided into the numbered Subregions in the above graphic. The first two digits of all five-digit chart numbers indicate the geographic subregion to which the chart pertains. Users can locate corrections in this Notice for charts of their immediate interest by determining the two-digit Sub-region number of the pertinent geographic area, and then turning to the page or pages that list the chart numbers beginning with those two digits.

AFTER 5 DAYS RETURN TO

DEFENSE SUPPLY CENTER RICHMOND

ATTN: JNAH
8000 JEFFERSON DAVIS HIGHWAY
RICHMOND, VIRGINIA 23297-5338

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NOTICE TO MARINERS

PLEASE EXPEDITE DELIVERY